DirectMail

Email and more on the iSeries

User Manual

iSeries & Toolmaker - Quality Combined

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Screens

“Screens” The iSeries screenshots in this manual may differ slightly from your actual screens.

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1.0 General Information

DirectMail is a product in the new TOOLMAKER series of e-business solutions. DirectMail allows you to send and receive email from any iSeries screen - whether you are working on a terminal or a PC.

1.1 Goals and benefits

Here are some of the special features of DirectMail which distinguish it from other products:

- Runs on iSeries RISC systems
- Outstandingly suitable for internal and external communications as a successor program to OfficeVision
- Easy to use for both PC iSeries emulation and terminal users
- Incoming Mail Assistant with many functions supporting process automation
- Email API for the integration of DirectMail into your iSeries applications
- Spool option for sending iSeries spoolfiles in the original format or in a range of PC file formats
- AutoMail for the automated sending of spoolfiles to recipients in a range of PC file formats (for orders, quotes, mailshots etc.)
- Central administration and maintenance

1.2 Terms of use

DirectMail/400 software may be used only on the machine identified in the product order. Changing the model requires a new password and may incur license fees. Please ask for a written quote first. Licensing for DirectView is based on the number of users. Please contact TOOLMAKER if you want to implement DirectMail for multiple users.

1.3 Technical requirements

The OS/400 operating system Version 4 Release 5 or higher on your iSeries, a network connection (Ethernet or TokenRing), an ISDN or DSL router (e.g. Bianca X1200 or similar) and an internet provider with an email account.

1.4 Extending the test period

If you cannot fully test DirectMail within the agreed test period, please give us a call. We can arrange an extended test period by phone.

1.5 Improvements to this manual

This is a new edition of the manual. We know from experience that **typing or printing errors** may have crept in, or that some sections may not be described in sufficient detail.

You may think that some sections require changes or additions. If so, feel free to make changes to the manual and then **send us a copy**. Thanks.

Versions

We try to keep our manuals up to date. However, the manual may not correspond to the software version from time to time. You can always find the latest information in the document *Enhancements Version x.xx* on the most recent data medium.

Screens

The iSeries screenshots in this manual may differ slightly from your actual screens.

1.6 Function keys

The function keys used in the programs comply with SAA standards. To avoid unnecessary repetition later in the document, the most common functions are described below:

F1 - Help
Displays the online user help for the current screen

F3 - Exit
Ends the current program and returns to the menu.

F4 - Prompt
Displays the input allowed for a field.

F5 - Refresh
Updates the display with the latest data.

F6 - Create
Creates new objects in the current window.

F12 - Cancel
Skips back one step in the program.

F17 - Top
Displays the first entry in a table.

F18 - Bottom
Displays the last entry in a table.

F21 - Command line
Displays a command line for entering iSeries commands (provided the user is authorised).

F23 - More options

If there are more options available than shown on the screen, F23 displays the additional options.

F24 - More keys

If there are more function keys available than shown on screen, F24 display the additional keys.

1.7 Restrictions

Because T-Online supports mail forwarding (SMTP Relay) only to a limited extent, you may experience problems in some situations if you are using T-Online as your provider.

1.8 Quick start

Because of the sheer number of functions described, the DirectMail manual has become quite extensive. Don't let this put you off. Once the product has been installed and configured, you will perform many tasks intuitively.

You can get a quick start by proceeding as follows:

Install (hardware and software), described in the chapter titled **Installation**

Configure (TCP/IP and a Mailbox), described in the chapter titled **iSeries Configuration for email**

```
ADDLIBLE DIRMAIL
```

```
GO EMAIL
```

Option 7 „Work with Emails“ described in chapter **Work with Emails**

2.0 Installation

The **first installation** of DirectMail includes installing the software on the iSeries, connecting and configuring the ISDN router/internet access, and configuring the email function in the iSeries operating system.

To **install a new version** of DirectMail (update), proceed as described in Section Software Installation. The installation program checks for existing data and copies it to the new library. All passwords are also retained.

2.1 Hardware Installation

The ISDN router will be connected to both the network and to an S0 bus or a DSL modem. Contact your hardware supplier or network engineer, as the configuration differs from router to router. The TCP/IP address, the exchange line and the access identifier to your internet provider are always required for the router. Configuration is usually done through a Telnet session to the router.

You can also use your existing internet connection. (NT Server, Exchange Server, dedicated lines, etc.).

2.2 Software Installation

2.2.1 Install online help system

Toolmaker ships DirectMail with an online help system providing context-sensitive help for the current screen. The online help covers the same topics as the PDF and printed manuals but is much more convenient. The online help system must be installed once before use.

The file `DirectMedia xx.xx english.exe` containing the installation programs is located either on the shipped CD-ROM or on the download area of the Toolmaker homepage.

Enter the command `WRKLIB DIRMEDIA` in a command line to check whether the online help system is already installed in the latest version. The online help system is already installed when the library DIRMEDIA with description **DirectMedia/DirectHelp Version 2.73** (or higher) is displayed. In this case the online help system must only be installed, if the version number of the file `DirectMedia xx.xx english.exe` is higher than the version number displayed using the command WRKLIB.

The self extracting file `DirectMedia xx.xx english.exe` starts the installation of the online help system. Follow the instructions on screen to install first the iSeries component (library DIRMEDIA) and then the PC client. You must install the PC client on each PC on which you want to display online help.

To install the PC client on additional PCs, extract the file `DirectMedia.exe` from the exe file mentioned above (for example with WinZip) and start the installation on each PC by double clicking it.

Hint:

For proper display of the online help the library DIRMEDIA must be in your library list. Please ensure this.

2.2.2 Update

If you are proceeding an update installation, please ensure that nobody is working with the product.

2.2.3 Install from iSeries CD-ROM drive

DirectMail is shipped on a data medium suitable for use on your IBM iSeries system. Both server and PC software are included.

Place the shipped CD-ROM in the CD-ROM drive on your iSeries

Sign on to your iSeries system with a user profile that includes ***ALLOBJ** and ***IOSYSCFG** rights, for example **QSECOFR**.

From a command line, enter the following command:

```
LODRUN OPT01
```

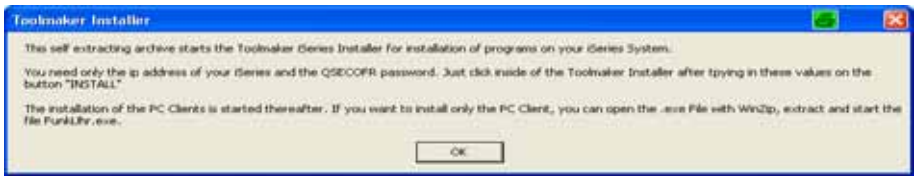
where OPT01 is the name of your CD-ROM drive.

2.2.4 Install from PC

You can also install using the Toolmaker iSeries Installer. The installation is done on a connected PC. You do not need access to the iSeries CD-ROM drive. FTP must be active and you must have the system TCP/IP address and the QSECOFR password.

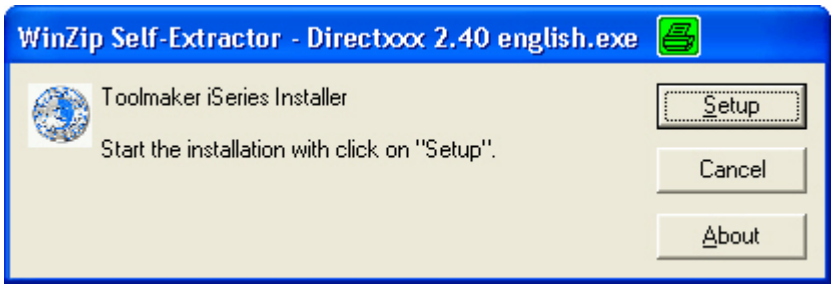
Insert the CD-ROM into the CD-ROM drive on your PC.

Start this installation variant by double clicking the file `DirectMail xx.xx english.exe` in the root directory on the CD-ROM. The self-extracting file will guide you step-by-step through the installation process.



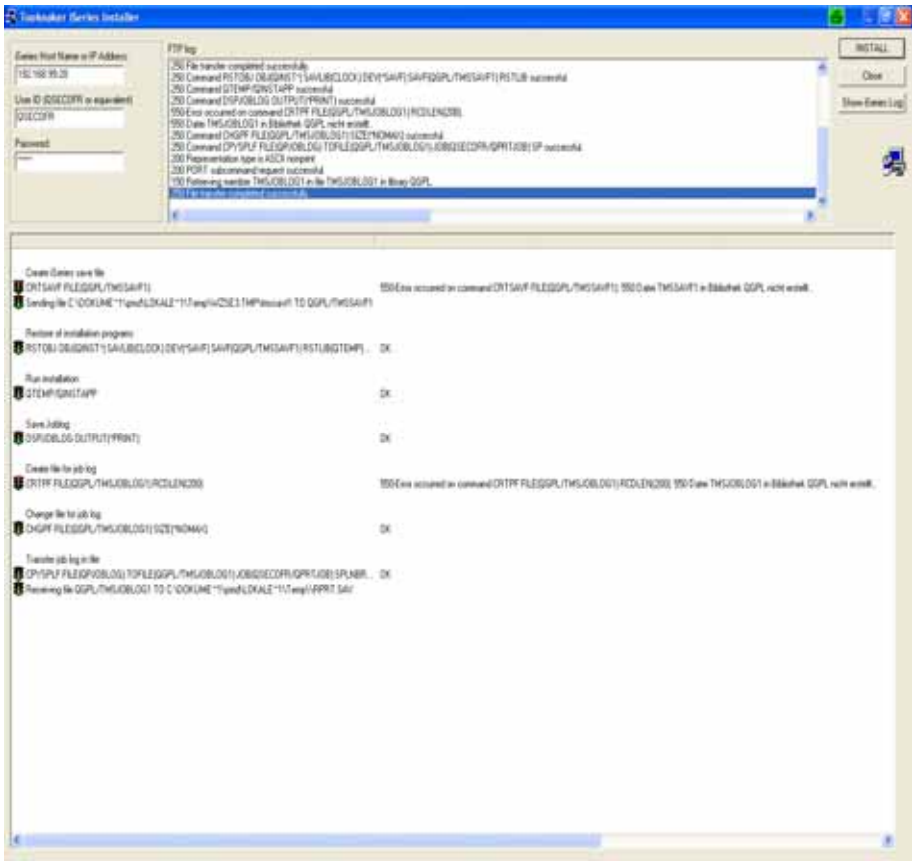
1020 – Toolmaker Installer

Read the notes on installation and click "OK" to continue.



1021 – Toolmaker iSeries Installer

To start the installation, click "Setup".



1022 – Installation dialog

Enter the IP address and the QSECOFR password, then click "INSTALL". When the installation is complete, you can display the joblog by clicking "Show iSeries Log". In case of successful installation the remark "**'File transfer completed successfully**" is noted at the end of the joblog. Please refer to the Toolmaker hotline for a revision of the installation process if you cannot find this remark. For this purpose save the joblog and send it via email to the Toolmaker hotline.

2.3 Install from download

Download the installation file `DirectMail xx.xx english.exe` from the "Software – DirectMail – Downloads" section of the Toolmaker website and start the installation by double clicking the .exe file.

The self-extracting file will guide you step-by-step through the installation process. When the installation is complete, you can display the joblog. The last line should read "**Product successfully installed**". Please refer to the Toolmaker hotline for a revision of the installation process if you cannot find this remark. For this purpose save the joblog and send it via email to the Toolmaker hotline.

2.4 Configure online help

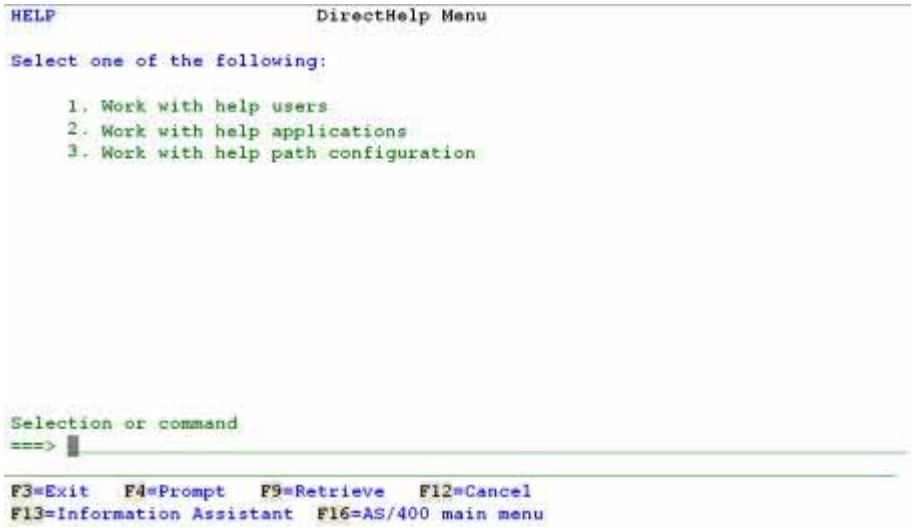
Because server, path and folder settings vary from customer to customer, Toolmaker has developed the online help system so that it can be customised to your environment with a few simple steps.

To start configuration, enter

```
ADDLIBLE DIRMEDIA
```

```
GO HELP
```

The online help menu is displayed.



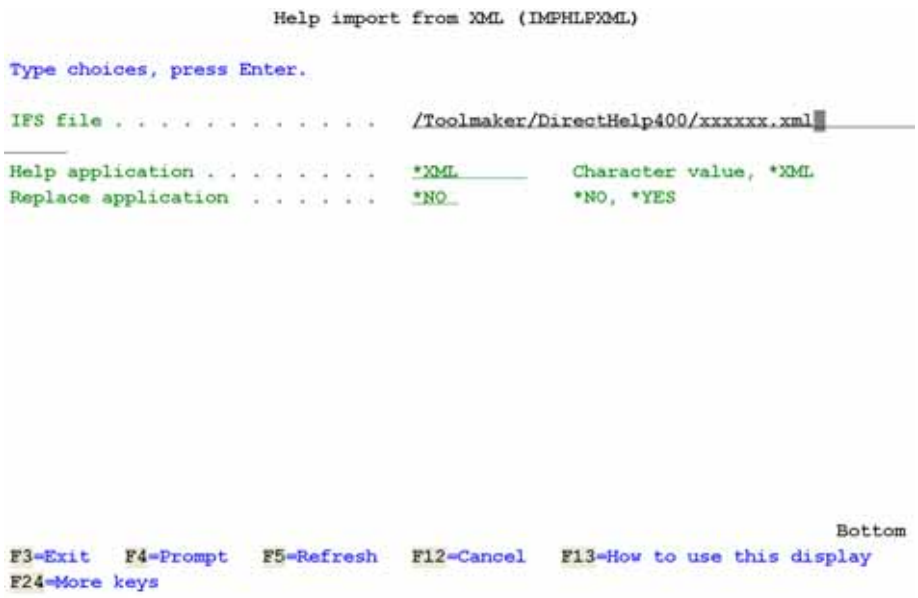
1017 – The DirectHelp menu

2.4.1 Check application

First check whether the application you want configure the online help for, is installed in the DirectHelp help system. To do so use option “Work with Help Applications”.

1023 –

If your application is not displayed here, it can be imported using the F14 function key.



1024 – Help import

IFS file

An application's help definition is stored in a XML file in the iSeries' integrated file system. By default the path /Toolmaker/DirectHelp400/Name of the application.xml is used. If you are not sure about the name of the file to be imported you can display the XML files using the commands **`CD ,/Toolmaker/DirectHelp400'`** and **`WRKLNK`**.

Help application
The default option *XML installs the application with the name stored in the XML file.

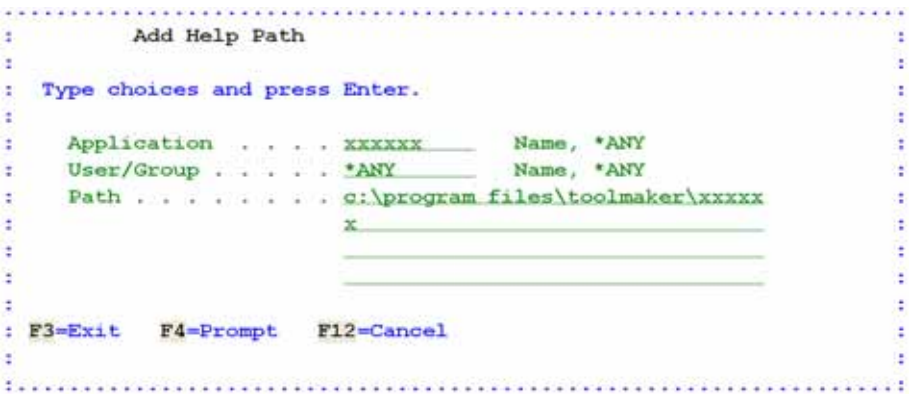
Replace application
With this you control, whether an existing application will be replaced by the contents from the XML file or not.

2.4.2 Configure paths

For a standard configuration, select option "Work with help path settings".

1018 – Help paths

You can use option 2 to change the DirectMail application for all users.



1019 – Change help path

Application
Name of the application the help file path shall be configured for.

User/Group
Use *ANY to create a setting for all system users.

You can make custom settings for users and groups by using the menu option **Work with help users** to create and group users. With menu option

Work with help path configuration, you can now replace the user *ANY with the users or groups you have created in order to define custom locations for employees. For example, a rep's local PC, a department server or a branch server. You can find more information on this topic in the manual of the DirectHelp online help system.

You will also find information on configuring the help display for menus and commands in the DirectHelp manual.

Path

Enter the path for the help file here. By default help files are installed in the path c:\Program Files\toolmaker\PRODUCT NAME on the user's client. However the setting can be changed here e.g. to store the help files centrally in the network for all users.

2.5 Install online help files

If you have installed from a download, the online help files are automatically installed. If you install from a CD-ROM, you will find the file `DiectMailhelp_e.exe` in the root directory. This file contains the Toolmaker online help files. Double click it to install to a local or network folder to which your users have access.

2.6 Assign password

You can test DirectMail without a password for up to 30 days after first installation. After that period, the shipped or faxed password must be entered. This is done with the commands:

```
ADDLIBLE DIRMAIL
```

```
INSPSW
```

Now follow instructions for password assignment. To use the full functionality of DirectMail (as both server and client), run the command INSPSW separately for the different license data to be entered.

2.7 License models

DirectMail can be used in different levels with more or less functionality. The functionality available depends on the license model. You can release functionality by entering the corresponding license code.

DM400

The basic license determines the number of mailboxes that can be processed with DirectMail. DM400 also includes the Incoming Mail Assistant.

DM400API

Required to use the APIs for calling DirectMail functions and creating and sending email directly from your applications.

DM400ATM

The AutoMail function allows you to send spoolfiles automatically without programming. Definitions are used to analyse, edit, convert and send mail. If

you have only one license for DM400ATM, only AutoMail jobs are started. Sending e-mail is not supported.

DM400CRY
Allows the encryption of outgoing e-mail in SMIME standard and also the encryption of PDF files.

DM400CVT
This license allows you to convert spoolfiles to different formats but not to send with DirectMail.

DM400LIT
With this license, you can use only one mailbox and no incoming mail assistant.

DM400PCL
With this license, you can convert incoming spoolfiles in PCL5 format.

DM400UNI
Allows unicode conversion for PDF format.

DM400DSP
License for DirectView, the product for conversion and display of spoolfiles on the PC.

2.8 Backup

E-mail sent and received from DirectMail are saved in the iSeries integrated file system. You should therefore include the directory /Toolmaker/DirectMail (/DirectMail400 for older versions) in the iSeries IFS in your daily backup.

If you process PC documents with DirectMail, these will also be saved in IFS directories. You should also include these directories in the backup.

In addition to the PC documents, you must of course also back up the iSeries database files containing DirectMail data. It's a good idea to include the complete DIRMAIL library in your daily backup routine.

2.9 Configuration

After successfully installing the hardware and software, use the menu EMAIL to configure. The menu and the options it contains are described in the next chapter.

2.10 Removal from the System

If you no longer want to use DirectMail on your system, first stop all activities with the software. If you have entered the library name DIRMAIL in job descriptions (JOBD) or system values (e.g. QUSRLIBL), remove it now. Log off and then log on again as **QSECOFR**. Using the following commands

```
ADDLIBLE DIRMAIL

CFGDIRMAIL CHGOPT(*NO)

RMVLIBLE DIRMAIL

DLTLIB LIB(DIRMAIL)

DLTMNU MNU(QSYS/EMAIL) DLTREFOBJ(*ALL)

RMVDIR DIR(DirectMail400)

RMVDIR DIR(Toolmaker/DirectMail400)
```

to start a delete job for all DirectMail objects found on the system and the library DIRMAIL. The delete will not complete successfully if any jobs are using DIRMAIL. Exit the menu first.

3.0 iSeries Configuration for Sending E-mail

Because TCP/IP configuration differs from company to company, the following configuration should be seen as an example.

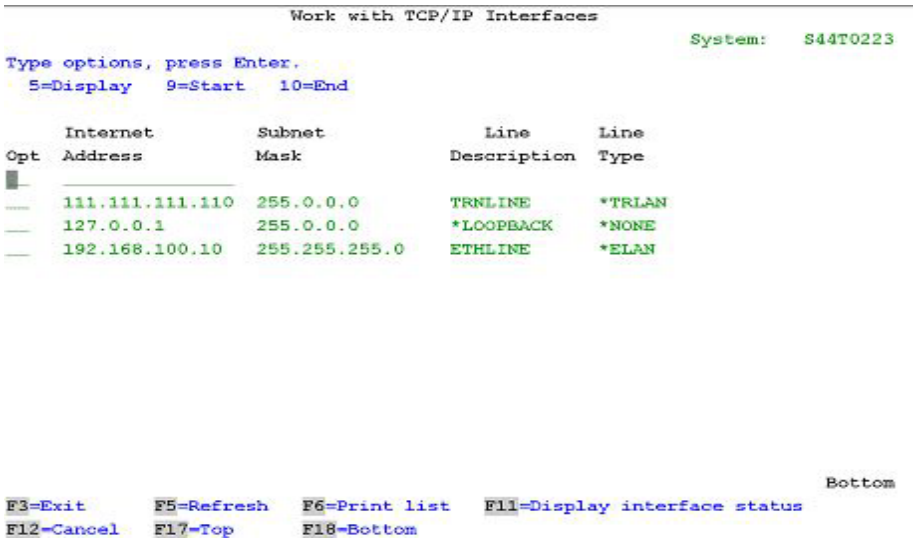
3.1 General

Start the configuration with the OS/400 command CFGTCP

3.2 TCP/IP interfaces

Use option **1** (Work with TCP/IP interfaces) to specify your Ethernet or Token Ring connection with the TCP/IP address and the iSeries subnet mask.

Example

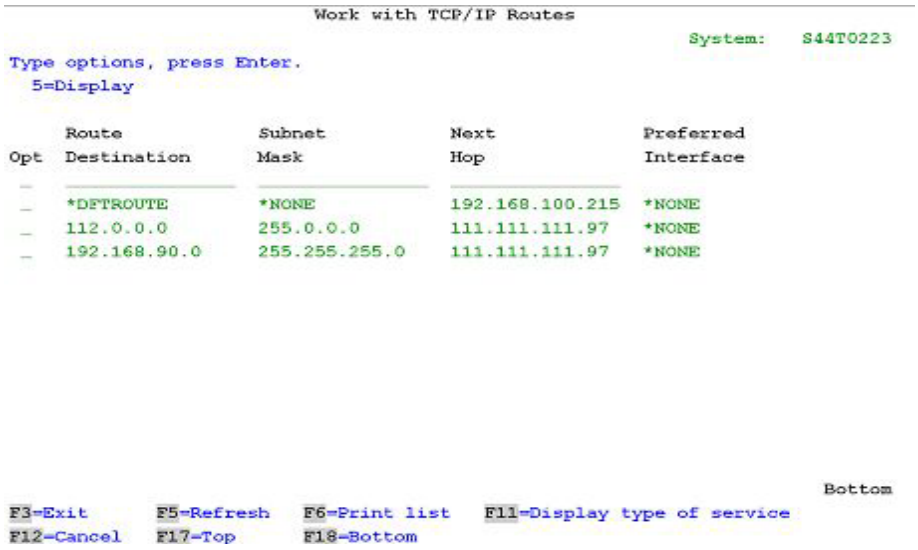


0001 – Example of an interface

3.3 TCP/IP routes

Here you specify the TCP/IP address for your internet connection. Enter ***DFTROUTE** as the route destination, select ***NONE** as the subnet mask and specify the **TCP/IP address** of your router as the next hop if you do not have an internal email server.

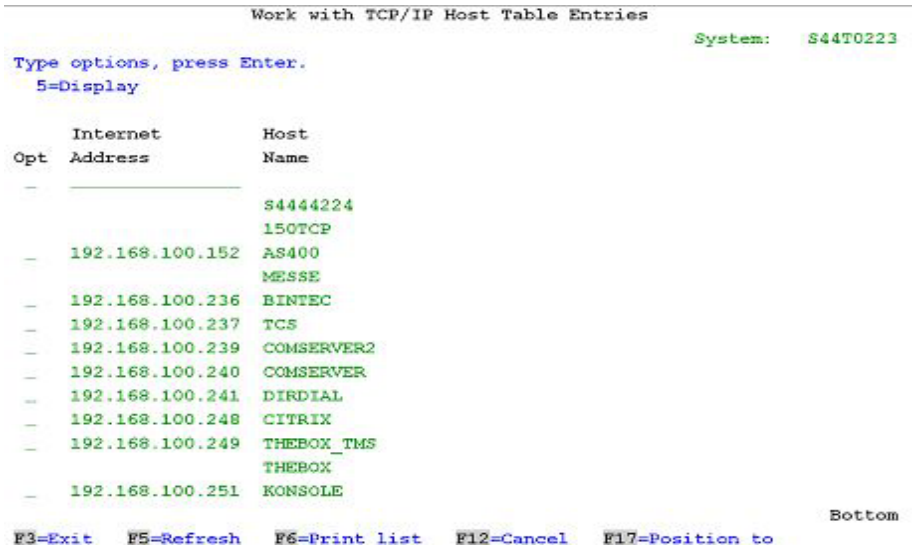
Note: This allows access to your iSeries while your are connected to the internet.



0002 – Example of a route

3.4 TCP/IP host table entries

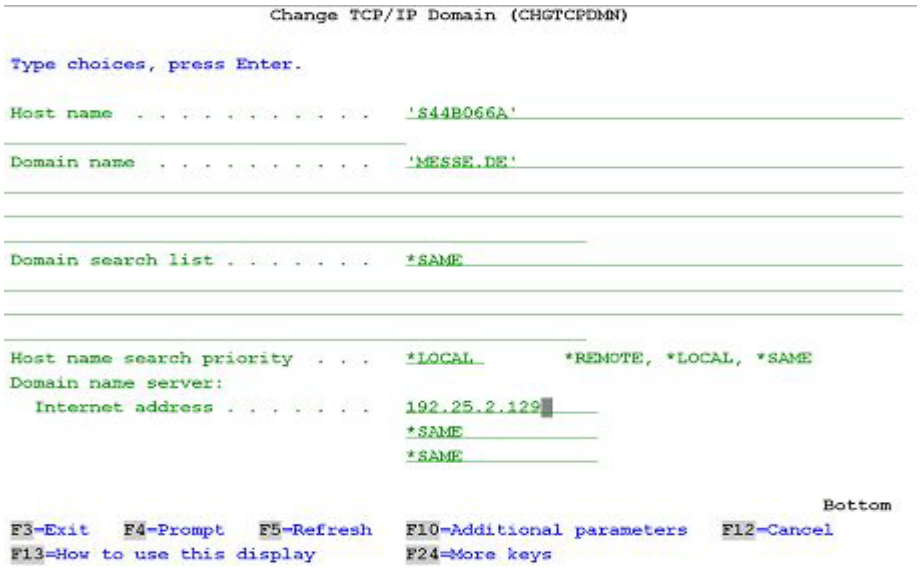
Use this display (option **10** from the configuration screen) to configure the local mail function if you want to send in-house e-mail. In our example, e-mail is locally distributed to MESSE:DE.



0003 - Host table entries

3.5 TCP/IP domain information

Please ensure that the entries made with option 12 produce a valid address that corresponds to the host table name specified with option 10.



0004 – Domain information

3.6 Configure TCP/IP applications

Use option **20** from the configuration menu to set the SMTP- and POP services for your iSeries.

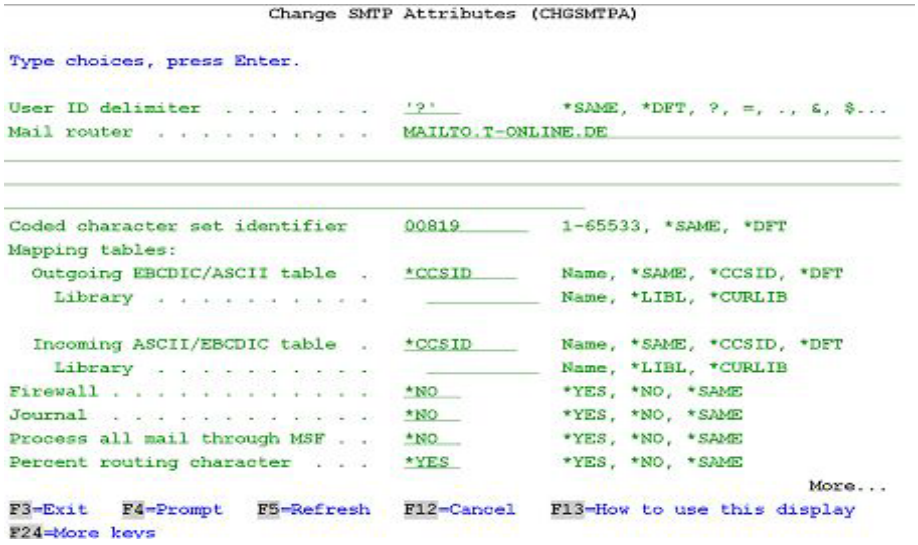
3.6.1 Configure SMTP

SMTP configuration is only required if you want to use the iSeries as an SMTP server. DirectMail allows you to use SMTP servers other than the iSeries.

Choose option **12** to configure the SMTP attributes. Use option **3** from the following menu to change the SMTP attributes.

0005 - SMTP attributes

Enter *YES for "Autostart server" and, if necessary, specify the Mail router on the second page (for example with T-Online, this is "mailto.t-online.de").

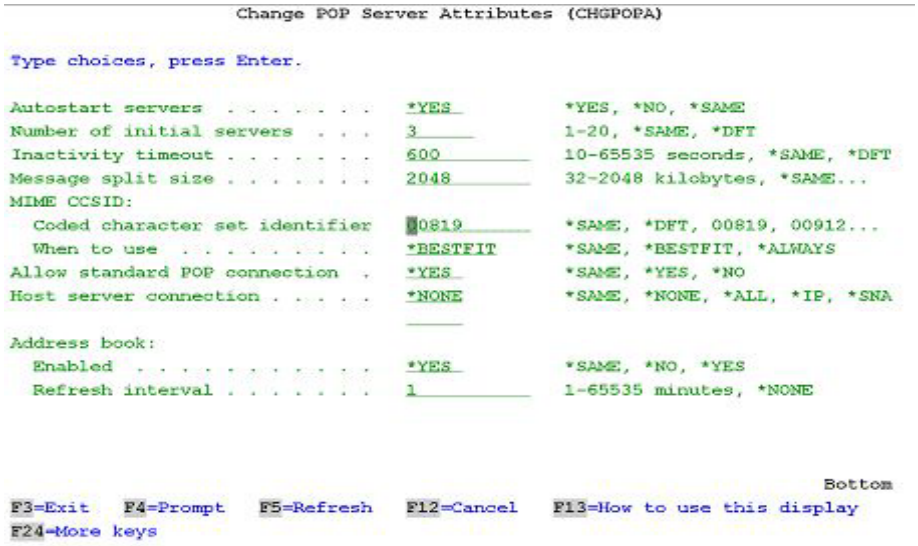


0006 – SMTP attributes, page 2

3.6.2 POP server attributes

POP configuration is only required if you want to use the iSeries as a POP server. DirectMail allows you to use POP servers other than the iSeries.

Choose option 16 to configure the POP server attributes.



0007 – POP server attributes

Again, enter *YES for "Autostart server".

Set message block sizeto the maximum value 2048. A lower value may split up and send your outgoing emails in multiple blocks. In most cases the receiving system will have difficulties in receiving the mail without problems.

You can use the following command to prevent OS/400 from splitting e-mail.

```
CRTDTAARA DTAARA(QUSRSYS/QTMSNOSPLT)
    TYPE(*CHAR) LEN(32)
```

3.7 Shut down and restart TCP/IP master computer

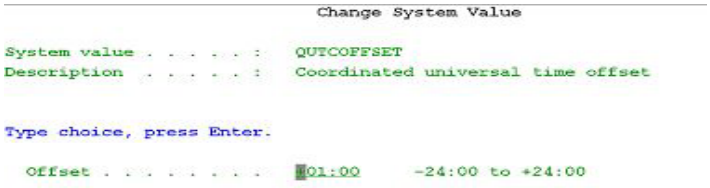
End the master computer functions SMTP and POP using the command `ENDTCPSVR SERVER(*SMTP POP)` , wait a few minutes until the servers have ended and restart them using the command `STRTCPSVR SERVER(*SMTP *POP)`.

3.8 Automatic start of the TCP/IP server

DirectMail requires running SMTP and POP3 servers in order to send e-mail. It's best to start TCP/IP and the server from QSTRUP to ensure that the servers are active every time the system is started.

3.9 iSeries system value for sending/receiving time

To account for the difference between Central European Time and GMT, ensure that the system value QUTCOFFSET is set correctly. The value must be **+02:00** during Summer Time and **+01:00** during Winter Time. This value can be set When configuring DirectMail.



0008 - QUTCOFFSET during Summer Time

4.0 Accessing DirectMail

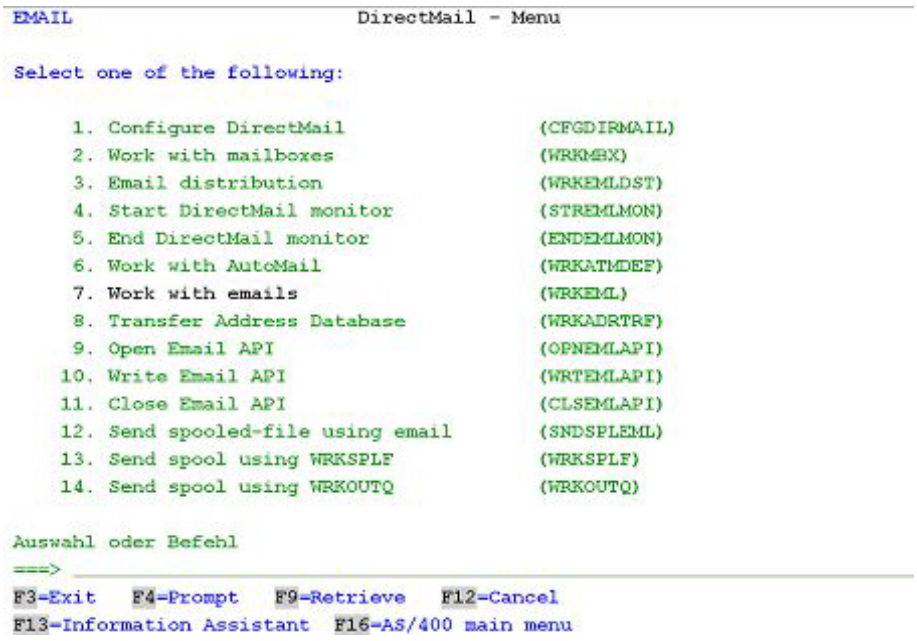
The following describes the main DirectMail menu, and how to configure DirectMail.

4.1 The DirectMail main menu

The DirectMail menu can be called using the following commands:

```
ADDLIBLE DIRMAIL

GO EMAIL
```

The following options are available:



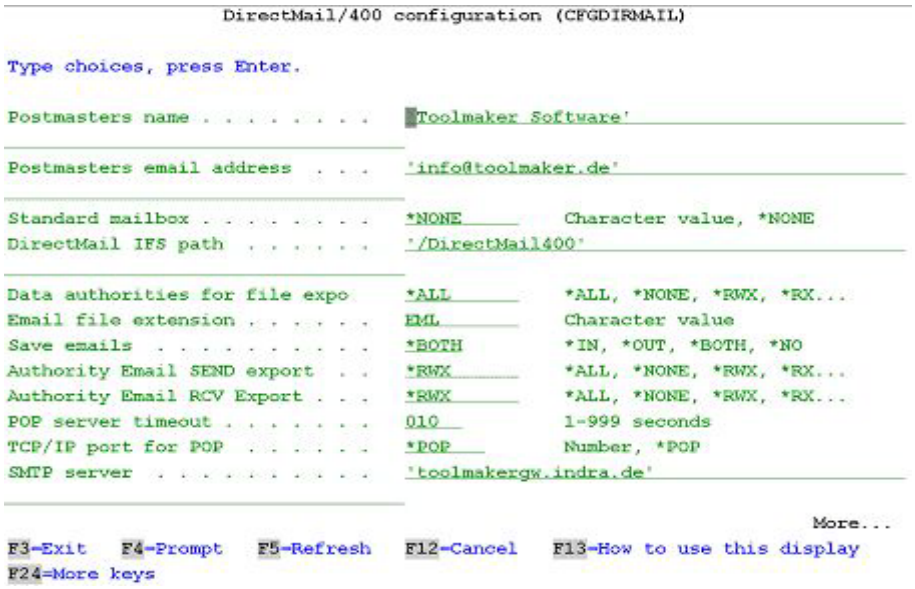
0009 – The DirectMail menu

The options are described in detail in the individual sections. The corresponding iSeries command is shown in brackets after each menu option. You can call DirectMail functions either from the menu or as iSeries commands.

4.2 Configure DirectMail/400 (Menu option 1)

Use the command `CFGDIRMAIL` to configure the parameters used by DirectMail. This does not affect the configuration of TCP/IP and mail functions**Fehler! Es wurde kein Textmarkenname vergeben.** These have been described in chapter **iSeries Configuration** for sending emails.

To see all parameters listed below, start `CFGDIRMAIL` using the function keys `F4` and then `F9`.



0010 - 1. The DirectMail configuration screen

Postmaster's name (NAMEMST)

Enter the name of the DirectMail/400 administrator. When system errors occur, error messages are sent to the administrator. The administrator does not have to be registered on the local iSeries system.

Postmaster's e-mail address

Specify an e-mail address for the postmaster. When system errors occur, error messages are sent to the administrator. The administrator does not have to be registered on the local iSeries system.

> **Note:** If you enter the e-mail address on a 5250 terminal, enter the "At sign" (@) using Alt+Hex (Hex=Help key) B5. You can also use "§" instead of "@". DirectMail will then correctly translate these characters. On the PC you can generate the @ character using Alt Gr + Q.

Standard mailbox (DFTMAILBOX)

Specifies a default mailbox, used when a function requiring a mailbox name is executed and no name has been provided.

DirectMail IFS path (MAILPATH)

Specifies the path in the iSeries IFS (Integrated File System) in which temporary and permanent files for DirectMail are saved. If this path does not exist, it will be created by the system automatically.

> **Note:** The folder system QDLS must not be used for this path, as it does not support long file names.

Backup copies of the sent mails are filed to the subfolder /SENT.

Data authorities for file export (EXPDTAAUT)

Allows you to specify file rights for files exported to the iSeries integrated file system.

> The values allowed for this parameter are:
>
> ***ALL** All users have full access rights to the files

***NONE** No user has access rights to the files

***RWX, *RX, *RW, *WX, *R, *W, *X**

Rights are assigned using the IFS options, with the following rules applying: R=Read, W=Write, X=Execute

***EXCLUDE** No user sees exported files in the IFS.

Email file extension (EXT)

The file extension that DirectMail/400 uses to save e-mail files in the IFS in MIME format. EML files, for example, can be opened with Microsoft Outlook Express on the PC. The iSeries uses "NOT" as the file extension for saving MIME files.

Save e-mail (SAVE)

Here you can specify whether e-mails sent or received with DirectMail should be saved as an original MIME PC file in the IFS. This backup copy can be used later, for example for archiving. Outgoing mails will be saved in the subfolder "Sent" below the DirectMail folder. Incoming mails are filed in the folder "Received". The file name consists of a Mail ID with a maximum of 20 characters and the extension specified in the EXT parameter.

The values allowed for this parameter are:

***BOTH** Incoming and outgoing mails will be saved.

***IN** Only incoming mails will be saved.

***OUT** Only outgoing mails will be saved.

***NONE** No mails will be saved.

Authorization Email SEND Export (MIMSNDOUT)

Allows you to specify file rights for files exported to the iSeries integrated file system during sending.

The values allowed for this parameter are:

***ALL** All users have full access rights to the files

***NONE** No user has access rights to the files

***RWX, *RX, *RW, *WX, *R, *W, *X**

Rights are assigned using the IFS options, with the following rules applying: R=Read, W=Write, X=Execute

***EXCLUDE** No user sees exported files in the IFS.

Authority e-mail RCV export (MIMRCVOUT)

Allows you to specify file rights for files exported to the iSeries integrated file system during receiving.

The values allowed for this parameter are:

***ALL** All users have full access rights to the files

***NONE** No user has access rights to the files

***RWX, *RX, *RW, *WX, *R, *W, *X**

Rights are assigned using the IFS options, with the following rules applying: R=Read, W=Write, X=Execute

***EXCLUDE** No user sees exported files in the IFS.

POP server timeout (POPTIMEOUT)

Some POP servers may have a bad response time pattern. You can use this parameter to customise the time period that DirectMail will wait for a reply from the POP server.

The values allowed for this parameter are:

1-999 Number of seconds for the timeout

TCP/IP port for POP (POPPORT)

Some POP Servers require a port other than the default port 110 for TCP/IP communication. This port can be set in this parameter.

The values allowed for this parameter are:

***POP** The default port 110 will be used for POP

SMTP server (SMTPSRV)

Here you can specify the default value for the SMTP server, over which the e-mails are to be sent from DirectMail/400.

Note:

The server address can be either an IP address or a name. The name must be compatible with the name server or the iSeries host table entries. A different SMTP name can also be specified for every mailbox.

Example:

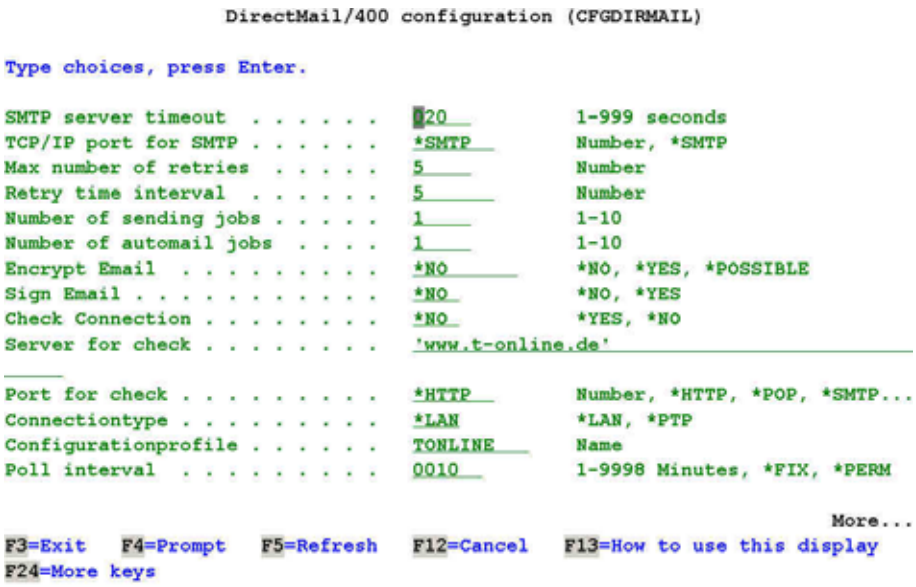
mail.toolmaker.de

204.12.179.1

The values allowed for this parameter are:

***AS400** All e-mail will be sent via the iSeries e-mail API. The API must be configured correctly.

Name Enter the server name or IP address.



0011 - 2. The DirectMail configuration screen

SMTP server timeout (SMTPTIMOUT)

Some SMTP servers may have a bad response time pattern. You can use this parameter to customise the time period that DirectMail will wait for a reply from the SMPT server.

The values allowed for this parameter are:

1-999 Number of seconds for the timeout

TCP/IP port for SMTP (SMTPPORT)

Some SMTP Servers require a port other than the standard port 25 for the TCP/IP communication. This port can be customised in this parameter.

The values allowed for this parameter are:

***SMTP** The standard port 25 will be used for SMTP.

1-9999 Enter a port number

Max number of retries (SMTPMAXR)

Specify how many times DirectMail should retry to send an e-mail before it is moved into the "Errors" folder. Incorrect sending attempts occur when, for example, the SMTP server cannot be reached due to a communication failure.

Retry time interval (SMTPINTR)

In case of an unsuccessful sending attempt a time interval will be used stating how many minutes DirectMail should wait before the next sending attempt.

Number of sending jobs (SNDJOBS)

Specify how many jobs should send e-mails in parallel. A higher value than 1 can result in a better performance when sending mass e-mails, since the overhead for the processing of e-mails will be reduced through many parallel running jobs.

Number of AutoMail jobs (ATMJOBS)

You can start multiple AutoMail jobs to improve performance. To do this, set the parameter ATMJOBS in CFGDIRMAIL. This starts one control job (DMATM) and one or more processing jobs (DMATMn).

Encrypt e-mail (ENCRYPT)

With this setting you configure the general procedure as to whether e-mails that are sent by DirectMail should be encrypted. This can be changed depending on each e-mail transaction.

The values allowed for this parameter are:

***NO** E-mail not encrypted

***YES** E-mail encrypted

***POSSIBLE** The encryption is possible, the e-mail be will sent encrypted with the certificate existing.

Sign e-mail (SIGN)

DirectMail also supports the digital signature of e-mails in order to ensure their authenticity.

The values allowed for this parameter are:

***NO** E-mails are not signed

***YES** E-mails are digitally signed.

Check connection (only with modem communication) (VERIFY)

Specify whether the internet/intranet connection should be checked every time a mail is sent or received. .

The values allowed for this parameter are:

***NO** The connection will not be checked.

1-9999 Enter a port number.

***YES** The connection is to be checked. DirectMail will only send/receive data when the connection has successfully been checked.

Server for check (VRYSVR)

If *YES is defined in the VERIFY parameter, the server for checking the connection has to be specified here. DirectMail will then try to establish a connection to this server before every receiving or sending operation.

Note:

The server address can be either an IP address or a name. The name must be compatible with the name server or the iSeries host table entries.

Example:

- mail.toolmaker.de
- 204.12.179.1

Port for check (VRYPORT)

The TCP/IP port of the destination system through which the connection for the checking is to be established.

The values allowed for this parameter are:

***HTTP** The port for HTTP (80) will be used.

***POP** The port for POP (110) will be used.

***SMTP** The port for SMTP (25) will be used.

***FTP** The port for FTP (21) will be used.

***TFTP** The port for TFTP (69) will be used.

Number The number of the TCP/IP port.

Connection type (CNNTYP)

Type of the internet/intranet connection.

The values allowed for this parameter are:

***LAN** The connection will be established via the local network. (Local Area Network)

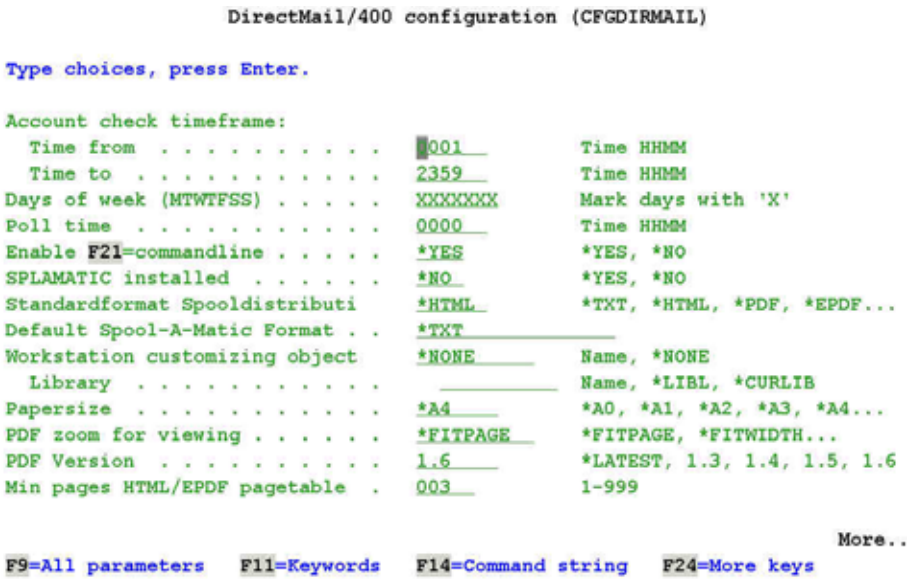
***PTP** The connection will be established via a modem on the V24 interface. (Point To Point)

Configuration profile (CFGPRF)

PPP configuration profile

Poll interval (POLINT)

This parameter specifies how often the system should permit an internet connection. The higher the interval is defined, the more messages can be dispatched in a single connection establishment. However, also the delay before arrival at the recipient increases.



0012 - 3. The DirectMail configuration screen

Amount check timeframe (TIMEFRAME)

Specifies the time window, in which the e-mail accounts will be checked for new messages. This can also save telephone costs.

> **Note:** These values will only be used when the 0=SYSVAL value is specified in the email account.

Days of week (POLDOW)

This parameter specifies on which days the system should be checked for new messages. Every weekday corresponds to a place in this parameter. Mo, Tu, We, Th, Fr, Sa, Su). This prevents e.g. unnecessary polling during the weekend.

Poll time (POLTIM)

With a *PTP type of connection (modem connection) you specify here on which time of day the system should connect to the Internet.

Enable F21=Command line (CMDLINE)

Using this parameter, the command key F21=command line can be deactivated in all DirectMail/400 programs.

> **Note:** Also when F21 is activated, the function key will not be displayed with the other function keys due to safety reasons.

The values allowed for this parameter are:

***YES** F21 for the command line is activated.

***NO** F21 for the command line is deactivated.

SPLAMATIC installed (SPLAMATIC)

SPLAMATIC is a product of the company Gumbo, with which you can convert the spoolfiles into different formats (host-print-transform, PDF, etc.). DirectMail contains the interface to SPLAMATIC, i.e. you can specify here whether you have installed SPLAMATIC and enter the default values for the spool conversion. We have included the SPLAMATIC software on the CD; if you are interested in this, please call TOOLMAKER.

The values allowed for this parameter are:

***YES** SPLAMATIC from Gumbo is installed

***NO** SPLAMATIC is not installed

Standard format spool distribution (DFTFORMAT)

Using DirectMail, you can send the spoolfiles as an email attachment. This parameter describes which format you select as the standard format for your system.

> **Note**: This value can be later overwritten by the user.

The values allowed for this parameter are:

***HTML *HTML** Sets HTML as the default file format.

***PDF** Sets Adobe PDF as the default file format.

***EPDF** Adobe's PDF file format, but in the Enhanced Version of DirectView PDF. This format supports elements such as form

overlays, allowing you to use background JPG or TIF files with the spool to create complete printed forms.

***TXT** Sets ASCII text as the default file format.

***CSV** Sets semicolon delimited text as the default file format.

***GUMBO** Sets SPLAMATIC as the default file format for converted spoolfiles.

***RAW** Copies the pure data stream to a PC file (used for PCL and AFP).

***HPT** Sets HPT Host Print Transform as the default file format

Default Spool-A-Matic format (DFTGMBFMT)

Enter the standard format for SPLAMATIC here; you can see the different formats using F4.

Workstation customising object (WSCST)

With conversion using host-print-transform, you can insert a workstation customising object which will be used when converting the printer data stream.

Library

Enter the name of the library in which the workstation customising object is saved.

Paper size (PAPERSIZE)

Specifies the default value of the paper size for the conversion of spoolfiles into PDF format. The values allowed can be displayed using F4.

PDF zoom for viewing (PDFZOOM)

Specifies the zoom factor for the opening of a file using Acrobat Reader.

The values allowed for this parameter are:

***FITPAGE** The complete page will fit in the display.

***FITHEIGHT** The height of the page will fit in the display.

***FITWIDTH** The width of the page will fit in the display.

***FITBOX** The zoom factor will be selected so that the smallest rectangle which can accommodate all page objects will fit in the display.

***RETAIN** Keeps the current zoom factor.

***MAX** The maximum zoom factor will be set.

PDF version (PDFVERSION)

Specifies the version for opening files using Acrobat Reader. It is important to ensure that PDF forms are created with the PDF version set here, or a previous version.

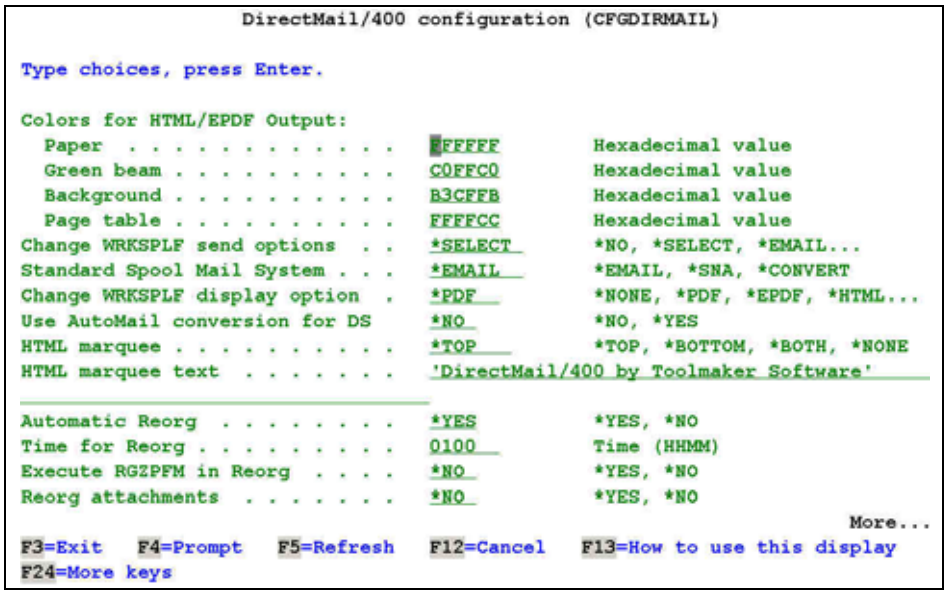
The values allowed are:

1.3 Acrobat 4
1.4 Acrobat 5

1.5 Acrobat 6
1.6 Acrobat 7

Min pages HTML/EPDF page table (MINPAGES)

Specifies the minimum amount of pages for the output of a page table when sending spoolfiles in HTML file format.
File format If the sent spoolfile has fewer pages than specified in this parameter, no page table will be output.



0013 - 4. The DirectMail configuration screen

Colours for HTML/EPDF output (Paper, Green beam, Background, Page table) (COLORS)

Specifies the colours for paper, green bars, background and page table for the HTML file output. These colours will be given in Hex codes according to the HTML standard. Below are the Hex codes of some colours:

Black = 000000 Green = 008000 Silver = C0C0C0
Lemon = 00FF00 Grey= 808080 Olive = 808000
White = FFFFFF Yellow = FFFF00 Chestnut = 800000
Navy blue= 000080 Red = FF0000 Blue = 0000FF
Light green =C0FFC0 Light blue = B3CFFB Light yellow = FFFFCC

Further information about HTML can be found under the following Internet links: http://www.anatom.uni-tuebingen.de/~richi/html/node12.html (TAG overview), http://www.w3.org/TR/REC-html40/ (HTML 4.0 Specifications)

Change WRKSPLF send options (CHGOPT)

Specifies whether Option 1=Send in the command WRKSPLF or WRKOUTQ should be changed in order to be able to send spoolfiles directly from the display of the respective command through Option 1=Send.

The values allowed are:

***SELECT** Here you can select when sending with which sending option the spoolfile should be processed. All available commands

(SNDNETSPLF, EMAILSPLF and CVTSPLF) can be used. Following the selection of Option 1=Send in WRKSPLF or WRKOUTQ, the type of sending desired can be selected.

***EMAIL** Only the EMAILSPLF command is available with Option 1=Send. SNDNETSPLF will no longer be offered for this option.

***CONVERT** The file will generally be processed with the CVTSPLF command and filed as TXT, PDF, E-PDF, or HTML file in the integrated file system of iSeries.

***NO** Only the SNDNETSPLF command is available with Option 1= Send. In this case a spoolfile can only be sent as an email by means of entering the EMAILSPLF command.

Standard spool mail system (DFTMAILSYS)

Specifies which Mail system will be suggested for the default value to the user, if the user wants to send spoolfiles with Option 1=Send in the WRKSPLF or WRKOUTQ command.

This parameter can only be specified if the *BOTH value has been specified for the CHGOPT parameter.

The values allowed are:

***SNA** The default value *SNA (SNDNETSPLF)

***EMAIL** The default value is *EMAIL (EMAILSPLF)

***CONVERT** The default value is *CONVERT, i.e. the spoolfiles will not be sent with Option 1 but will be converted.

Change WRKSPLF display option (CHGOPTDSP)

If you set this parameter to *YES, Option 8=Attribute changes in WRKSPLF and WRKOUTQ. The program used for fast configuration of spool conversion with DirectView is called if the current user has *SPLCTL rights. Definitions created in this way are "mini" AutoMail definitions. They can be changed with WRKATMDEF.

The values allowed are:

***YES** Note: changes Option 8=Attribute in WRKSPLF and WRKOUTQ

***NO** Display option is not changed

Format for DSPFPLF (DSPFORMAT)

Format for DSPFPLF.

The values allowed are:

***NONE** The display format is not changed.

***PDF** Sets Adobe PDF as the display format.

***EPDF** Display format is EPDF.

***HTML** Display format is HTML.

***TXT** Display format is TXT.

***PCL** Display format is PCL.

***CSV** Display format is CSV.

***GUMBO** Display format is GUMBO.

***HPT** Display format is HPT

Use AutoMail for DSPSPLF (USEATMDSP)

Specifies whether spoolfiles displayed as PC files use AutoMail.

The values allowed are:

***YES** Use AutoMail.

***NO** Do not use AutoMail.

HTML marquee (USEMRQ)

Specifies whether a spoolfile that is to be sent as a HTML document should be provided with an additional marquee. This marquee can then be used for purposes of copyright, advertising or other ends.

Note: This marquee is not supported by all Internet browsers. It will then be displayed as normal text.

The values allowed are:

***NONE** No marquee will be added.

***TOP** The marquee appears at the top of the file.

***BOTTOM**. The marquee appears at the bottom of the file.

***BOTH** The marquee appears at the top and the bottom of the file.

HTML marquee text (MRQTXT)

The text that will be added as a marquee of a spoolfile that is sent in HTML format.

Note: This marquee is not supported by all Internet browsers. It will then be displayed as normal text.

Automatic reorg (REORG)

Specifies whether the Reorg of the DirectMail should occur automatically. In the Reorg process e.g. old emails, which have exceeded their “expiry date” will be deleted automatically.

The values allowed are:

***YES** Emails will be reorganised automatically.

***NO** Emails will not be reorganised automatically.

Time for reorg (RGZTIME)

Specifies the time for the automatic Reorg. It is recommended to carry out the Reorg over night as this can take up a lot of time.

Execute RGZPFM in reorg (RGZPFM)

Here you specify whether the files should be reorganised in the periodical Reorg. If you don't want this, you also have the possibility of doing this at any time using the RGZDIRMAIL command.

The values allowed are:

***YES** Files will be reorganised automatically

***NO** Files will not be reorganised automatically

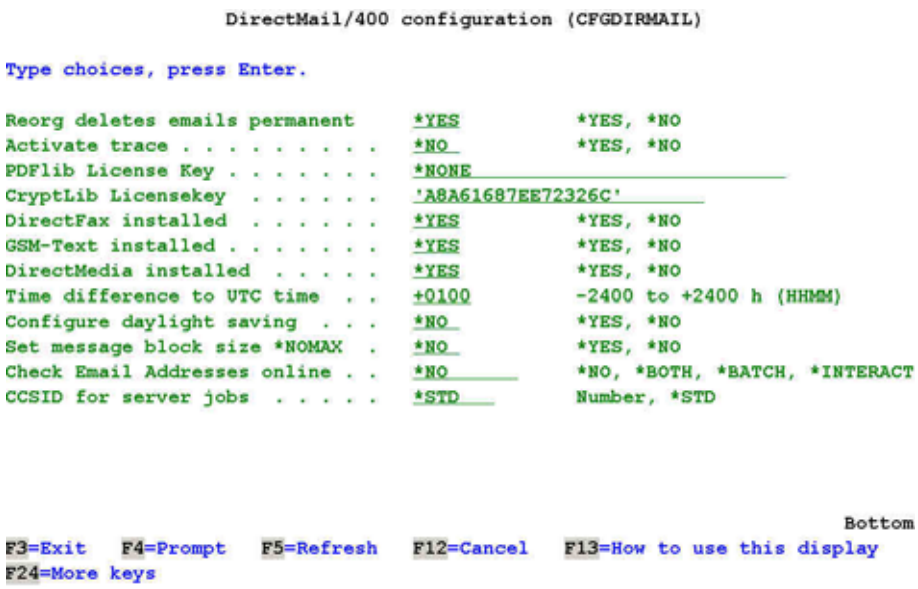
Reorg attachments (RGZATTACH)

Here you specify whether the attachments should also be reorganised in the periodical Reorg.

The values allowed are:

***YES** Attachments will be reorganised automatically

***NO** Attachments will not be reorganised automatically



0014 - 5. The DirectMail configuration screen

Reorg deletes emails permanent (RGZDLTPERM)

This parameter defines whether email is deleted permanently during reorganisation or moved to the folder for deleted objects. For example, to move email from a folder to the "Deleted" folder after ten days and then permanently delete it after another ten days, set 10 days for the original folder and 20 days for the "Deleted" folder.

Activate trace (TRACE)

In order to observe the file transfer between POP/SMTP server and DirectMail, you may activate a trace. In case of TRACE(*YES) for each outmail server a trace file is created in the ../debug directory named Jobname_Jobnumber.txt within the IFS.

Note: This function should only be activated when there are problems with DirectMail and after consultation with the TOOLMAKER Hotline.

PDFLib license key (PDFLIBLIC)

Allows you to enter a PDFLib license key

CryptLib license key (CRYPLIC)

Enter the license key into this **parameter** if the license DM400CRY was acquired. It is not the Toolmaker "SoftKey" but the license key of XPS-Software company.

DirectFax installed (DIRECTFAX)

Indicates, whether DirectFax/400 is installed on the system. This enables the Incoming Mail Assistant to forward emails as fax.

The values allowed are:

***YES** DirectFax/400 is installed.

***NO** DirectFax/400 is not installed.

GSM Text installed (GSMTEXT)

Indicates, whether GSM Text is installed on the system. This enables the Incoming Mail Assistant to forward received emails to a mobile phone via SMS.

The values allowed are:

***YES** GSM Text/400 is installed.

***NO** GSM Text/400 is not installed.

DirectMedia installed (DIRMEDIA)

Indicates, whether DirectMedia is installed on the system. This enables emails and attachments , containing PC files to be displayed on the PC.

The values allowed are:

***YES** DirectMedia is installed.

***NO** DirectMedia is not installed.

Time difference to UTC time (UTCOFFSET)

Difference from UTC time. Specifies by how many hours and minutes the current system time differs from UTC time (Universal Coordinated Time), i.e. Greenwich Mean Time.

For Germany the following values apply in normal cases:

+0200 Summer Time

+0100 Winter Time

A change of this value will be effective immediately. The default time for the job will be determined from the system value QUTCOFFSET. Changes will also be made in the system value.

Configure daylight savings (CFGDLS)

Specify whether DirectMail should automatically carry out the adjustment of the time differentiation of the system value QUTCOFFSET with a change from Summer Time to Winter Time and the other way around.

Set message block size *NOMAX (NOMSGSPLT)

Specifies whether the MSGSPLIT value in the CHGPOPA command should take the *NOMAX value.

If this value is set to *NO, larger emails will be split up into more parts depending on the setting in the MSGSPLIT parameter in the CHGPOPA command. This may result in the recipient not being able to read the email.

The values allowed are:

***YES** Use *NOMAX for the MSGSPLIT value

***NO** Use the MSGSPLIT value

Check email addresses online (CHKONLINE)

Specifies whether or not to check email addresses online.

The values allowed are:

***NO** Do not check email addresses on the internet.
***BOTH** Check email addresses on the internet.
***BATCH** **Check email addresses in batch mode.**
***INTERACT** **Check email addresses interactively.**

CCSID for server jobs (SRVCCSID)

Specifies whether or not to check email addresses online.

The values allowed are:

***Number**
Number CCSID for server jobs

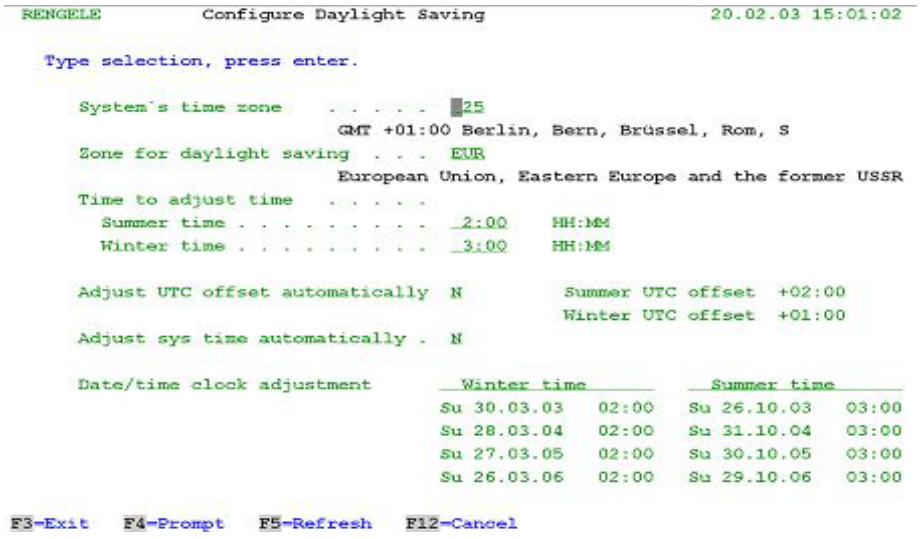
***STD**
Standard CCSID for server jobs

4.3 Summer/winter time adjustment

As DirectMail needs correct time specifications for sending and receiving emails, some configuration programs were included which allow to update the system time and the system values:

4.3.1 Configuration of time adjustment

Using the command **CFGDAYLS** (Configure Daylight Saving) the automatic system changeover from summer time to winter time can be arranged. This ensures a correct time when sending or receiving emails.



0015 – The Configure Daylight Savings screen

System Time zone

The valid time zone for the location will be set here, which is "25" for Germany. The time zones can be set via the function key F4 and Option 1.

Zone for daylight saving

The zone for the validity scope of the summer/winter time will be set here, i.e. "EUR" for Germany. The time zones can be set via the function key F4 and Option 1.

Times for adjustment

Enter the time for the adjustment here. Enter valid values for daylight saving or winter time.

The values allowed are:

Daylight saving time HH:MM

Winter time HH:MM

Adjust U^{fn}TC Offset automatically

Effects the automatic adjustment of the QUTCOFFSET system value using the value shown below.

The values allowed are:

Y The adjustment takes place automatically.

N The adjustment must be carried out manually.

Adjust System time automatically

Effects the automatic adjustment of the system time at the time of the summer/winter time adjustment using the value shown below.

The values allowed are:

Y The time adjustment takes place automatically

N The adjustment must be carried out manually.

4.3.2 System time via Internet

Using the **GETTIMNTP** command, the system time can be read by an NTP (Network Time Protocol). This command can be used to update the time on the iSeries. (An API licence is required).

This command can be embedded via the Scheduler job (**WRKJOBSCDE**) and be called as required.

0016 – System time over the Internet

NTP server

Specify the TCP/IP address of an NTP server in the Internet. You will find some servers under the following Internet links:

http://www.eecis.udel.edu/~mills/ntp/clock1.htm

http://www.eecis.udel.edu/~mills/ntp/clock2.htm

NTP port

Here you can set the port that will be used for communicating.

The values allowed are:

Number A valid port, which matches the NTP server from the above parameter.

***NTP** The default port for NTP

Change system time

You can control with this parameter, whether the system time transmitted from the Internet will change the system time of your iSeries via the QTIME system value

The values allowed are:

Y The system time will be changed

N The system time will not be changed

4.4 Data area DMDTAARA

Some very rarely used functions have been transferred to a data area, which can be viewed using the **WRKDTAARA DIRMAIL/DMDTAARA** command and can be changed using **CHGDTAARA DIRMAIL/DMDTAARA** and the F4 function key.

Position 236
If in this Position is a '1' the Profile Handle APIs in AutoMail should be used.

Position 663
An ‚0' in position 663 of this data area suppresses the Copyright note of a spoolfile in case of HTML conversion.

Position 664
An ‚0' in position 664 of this data area suppresses the page heading of a spoolfile in case of HTML conversion.

Positions 738 -749
When converting wide SPLF to EPDF (enhanced PDF), with some reports the last characters at the end of the line were truncated. In order to influence the actual width of the PDFs, a conversion factor for mm->inch was inserted in DTAARA DMDTAARA. If this value is not filled, 0.03527731092 will be used. However, the correct conversion factor for mm->inch is 0.039370078. Should this value be set, the data area can be changed as follows:

```
CHGDTAARA DTAARA(DMDTAARA (738 12))
   VALUE('0.039370078 ')
```

Positions 765 -768
In order to better represent the bold print with a spool conversion to EPDF, every bold printed character will be moved horizontally, i.e. the bold print will be simulated through the slight movement. This movement factor can be specified in the DMDTAARA data area. The default value is 0.5.

```
CHGDTAARA DTAARA(DMDTAARA (765 3)) VALUE('0.5
   ')
```

The higher the value, the larger the movement of the overlay.

Spool to EPDF conversion now also supports barcodes with the ^BCD command. This command requires the additional license DM400BCD. If you do not have a license, the text "No license" will be printed on the barcode.

Position 771
When converting databases into CSV, it can now be specified whether numerical values should be set in ““. If the position 771 is put to 'N', no "" will be inserted.

The values allowed are:

Y "- Insert the characters

N "- Do not insert the characters

```
CHGDTAARA DTAARA(DMDTAARA (771 1)) VALUE('J')
```

Position 815
When converting spool data to HTML and EPDF, the green bars will be inserted by default every three lines. This value can be changed with this place. When 1 is specified, a colour change will be made after each line.

```
CHGDTAARA DTAARA(DMDTAARA (815 1)) VALUE('1 ')
```

Position 816-835

An Exit Program can now also support the assignment of a spoolfile to an AutoMail definition. In the data area DMDTAARA, in the positions 816-825, it is the program name, and in 826-835 the program library, which are to be entered.

In order to use the Exit Program ATMEXTPGM in the DIRMAIL library, enter the following command:

```
CHGDTAARA DTAARA(DIRMAIL/DMDTAARA (816 10))
    VALUE('ATMEXTPGM ')

CHGDTAARA DTAARA(DIRMAIL/DMDTAARA (826 10))
    VALUE('DIRMAIL   ')
```

The exit program has to accept the following parameters:

```
c   *entry       plist
c               parm            atmdef      10      AutoMail Definition
c               parm            filnam      10      Filename
c               parm            usrdta      10      Userdata
c               parm            frmtyp      10      Formtype
c               parm            pgmnam      10      Program Name
c               parm            usrnam      10      User
c               parm            outq        10      OUTQ
c               parm            outqlib     10      OUTQ Library
c               parm            atrrcd      2048    Attribute record
c               parm            dbfile      10      CPYSPLF File
c               parm            dblib       10      CPYSPLF File Library
c               parm            rtnatmdef   10      Return AutoMail Definition
```

The ATRRCD parameter contains the attributes of the spoolfile in the SPLA0100 format of the QUSRSPLA API.

The DBFILE and DBLIB parameters specify the output file of CPYSPLF for this file. The output format is in PRTCTL format.

The RTNATMDEF parameter allows the return of an AutoMail definition, which should be used for the current spoolfile. If this field is returned with *BLANK, AutoMail will not process the Spool file. If a valid AutoMail definition is specified, the file will be processed with this definition, even if it differs from the ATMDEF parameter.

The source file QRPGLESRC in the DIRMAIL library contains an example of the definition.

Position 837-838

During the conversion of spooled files the numeric csv column values can now cleaned up, so that Excel can read this values without problems. The

plus/minus sign is exported in front of the value and the thousands separator will be removed.

To use this function please change the following values in the dataarea DMDTAARA:

```
CHGDTAARA DTAARA(DMDTAARA (837 1)) VALUE('1')
```
(Perform clean up)

```
CHGDTAARA DTAARA(DMDTAARA (838 1)) VALUE('.')
```
(thousands separator is dot ".")

Position 839
In position 839 of the data area DMDTAARA you can specify the page separator – page: n -- If you don't want to have this, use the Value „N" = No.

```
CHGDTAARA DTAARA(DMDTAARA (839 1)) VALUE('N')
```

Position 840
In position 840 of the data area DMDTAARA you can specify the column separator for CSV files (Default=',')

Position 841
In position 841 of the data area DMDTAARA you can specify the embedding sign for CSV files. (Default="")

Position 842
In position 842 of the data area DMDTAARA you can specify the decimal character for CSV files (Default='.')

Position 843
In position 843 of the data area DMDTAARA you can specify if the command OPNEMLAPI should check the email address. If this position is "N", no check will be executed.

Position 878
Here it can be specified whether identical emails, which have been received multiple times also shall be distributed multiple times via the PE-Assistant. If a 'N' is set here, completely identical emails are distributed only once. If the key is set to "M" only the key words FROM/DATE/MAIL-ID of the mime file are used.

Position 879
With position 879 in data area DMDTAARA the compressing factor for files in EPDF format is specified. Value range 0-9. 0=no compression, 9=high compression. This parameter only takes effect if the UNICODE license is installed.

Position 896
In position 896 of the data area DMDTAARA it can be specified whether the "+" character shall be interpreted as sign for a line to be continued within the email text. Value "1" deactivates this function.

Position 929
In position 929 of the data area DMDTAARA, you can use 'N' to disable authorisation checks for spoolfile display.

Positions 929-940

Additional characters for a valid email address can be specified in the positions 931-940 of DMDTAARA.

Positions 941-946

Now the conversion of spools to CSV supports also an automatic method for setting the CSVTABS using the parameter CSVTAB(*AUTO). With it DirectMail scans a determined line range for finding suitable CSVTAB positions. The line range used can be set on the positions 941-943 (from) and 944-946 (to) in the DMDTAARA data area. Default values are lines 10-60.

4.5 DirectMail library and directories

Data from DirectMail will both be filed in native iSeries files in the library and in the integrated file system (IFS) of iSeries. The following structures will be used within the IFS for DirectMail/400:

/DirectMail400

Root directory for DirectMail (This directory can be changed with CFGDIRMAIL)

/DirectMail400/Certs

Filing directory for digital certificates

/DirectMail400/Fonts

Fonts for Unicode PDF conversion

/DirectMail400/Forms

Form templates for DirectMail

/DirectMail400/Graphics

Storage of graphic data

/DirectMail400/Mailboxes

Saved emails in .eml format for the display with DirectMedia

/DirectMail400/Sent

Email files received in Mime format

/DirectMail400/Received

Email files received in Mime format

/DirectMail400/Temp

Temporary DirectMail files

/DirectMail400/Temp/Automail

Temporary files for Automail

/DirectMail400/Temp/Convert

Temporary files for conversions

/DirectMail400/Temp/MimeSnd

Temporary MIME files for sending

/DirectMail400/Temp/MimeRcv

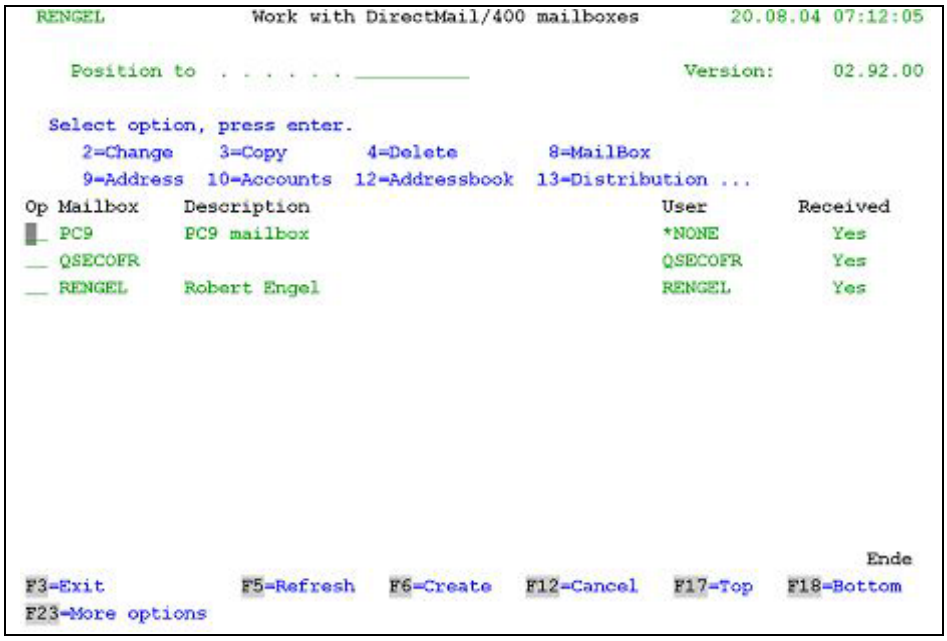
Temporary MIME files for reception

5.0 Mailboxes (Menu Option 2)

Every user in DirectMail should get their own mailbox in which to save in- and outgoing emails in one area. Mailboxes can also exist independently without being assigned by the user. This way special functions like group mailboxes for Info@..., Sending@..., etc., can be carried out. The only danger with this is the mailbox becoming deserted without any user assignment. In these cases precautions should be taken so that mailboxes without user assignment can be checked regularly.

Work with DirectMail mailboxes:

From the main menu you can jump to the mailboxes with Option 2; alternatively use the **WRKMBX command** . You will receive the following display:



0017 – Work with mailboxes

Options

2=Change

Use this option to change the information for the mailbox and the configuration settings. See chapter **Change mailbox (Option 2)**

3=Copy

For copying a mailbox, e.g. for a new user. See chapter **Copy mailbox** (**Option 3**)

4=Delete

For deleting a mailbox, e.g. when a staff member leaves. See chapter **Delete mailbox** (**Option 4**)

8=Mailbox

Displays the in- and outgoing emails. With this option new emails can be created and sent interactively as well. See chapter **Mailbox: work with emails (option 8).**

9=Address
With this the mailbox owner's address information can be changed. It will be stored in the user directory. See chapter **Email address (option 9).**

10=Accounts
Several accounts can be assigned to every mailbox. This is necessary, if e.g. numerous providers must be polled or if an employee is in charge of numerous functions (user MEIER retrieves mails for meier@test.de, for info@test.de, for vertrieb@test.de, etc.). Generally: an account must be available for every email address. See chapter **Email Accounts (Option 10).**

12=Address book
For the administration of email addresses, a structured address book is stored in DirectMail, which you can administer via this option. See chapter **Address book (Option 12).**

13=Distribution
One of the outstanding features of DirectMail is the Incoming Mail Assistant with the help of which you can automate processes. Functions such as forwarding, automatic reply, notification, etc. are possible. The Incoming Mail Assistant will be described in the chapter "Incoming Mail Assistant".

14=Absence
Working together with the Incoming Mail Assistant you can send an automatic reply to the sender if you are absent, e.g.: e.g. "Your email to meier@test.de was received. Mr. Meier is on holidays until 14.09. Your email will be dealt with afterwards." The times of absence can be administrated with this option. See chapter **Absence (Option 14).**

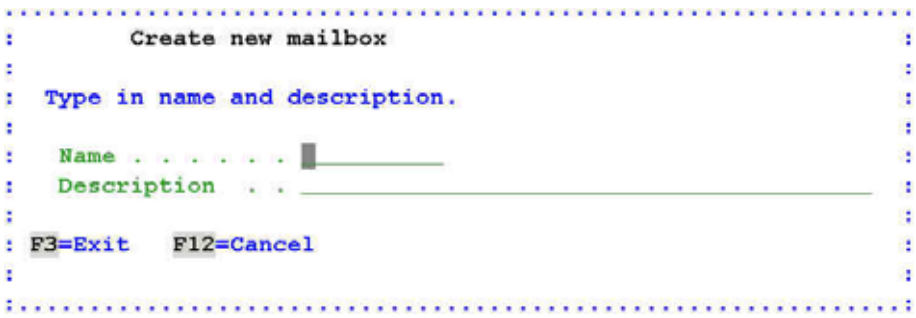
15=Auto sign
Here you can enter a text, which will be sent as a "signature" with every email. Consequently you can automatically send the salutation, company name, address, etc., with the email. See chapter **Edit AutoSignature (Option 15).**Fehler! Es wurde kein Textmarkenname vergeben.

16=Password
When you want to protect your mailbox from unauthorised access, you can enter a password here The mailbox password is saved temporarily for each job. Once a password has been entered correctly, you will not be prompted for it again for that job and mailbox.

18=Certificates
For the digital signature of emails, certificates are required. You can administrate them using this option. See chapter **Certificates** (Option 18)

Function keys

F6=Create
Using this function key you can create a new mailbox. You will receive the following screens for entering the mailbox name and a description.



0367 – Create mailbox

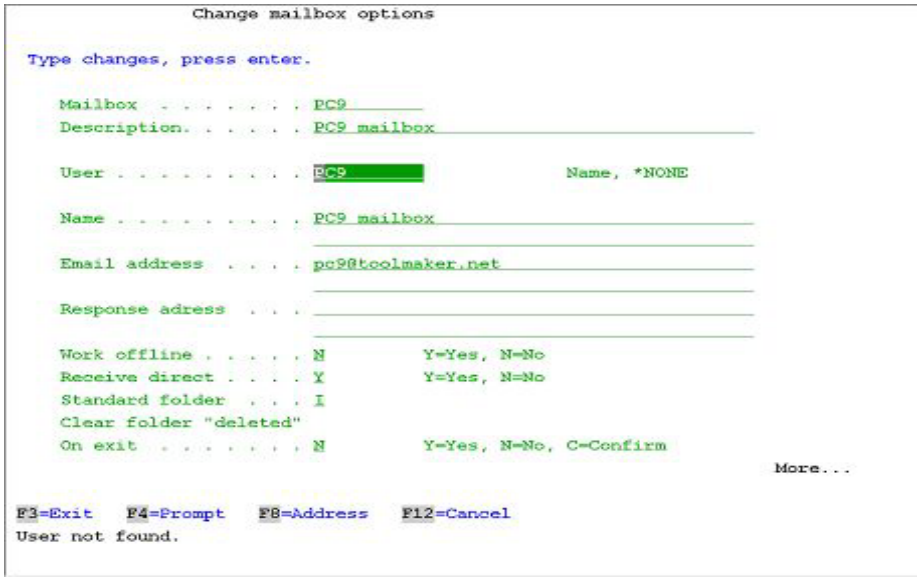
Name
Mailbox name

Description
Mailbox description

Press the function keys **F3** or **F12** to exit or the enter key to confirm the new definition. You will then receive the subsequent screen (as described in 5.1), which is identical to the screen when changing a mailbox.

5.1 Change Mailbox (Option 2)

With Option **2** you will see the following screen:



0018 – Change mailbox options, page 1

Mailbox
Assign a name to the mailbox, which is associated with the content, e.g. user names or group names like SENDING, INFO, SERVICE, etc.

Description
Here you can enter a text description of the mailbox.

User
A user can be assigned to every mailbox. This way when calling DirectMail the user will go directly to their mailbox after activating “Work with emails” from the DirectMail menu or after entering the command **WRKEML**.

Name
This name will be used as the sender name for outgoing emails.

Email address
The email address of the user. Regardless of how many accounts each user has, their outgoing emails will be sent with this address.

Reply address
This address will be used when the recipient of your email replies on your mail. By entering a different email address you can forward your reply to another user, e.g. when you initially work on transactions with the further processing being carried out in your house by other users.

Work offline
Working offline means that the monitor does not check for new messages automatically. This must be done by the user manually using F22=Transmit.

Direct receiving
Direct receiving means that DirectMail checks when sending an email whether the recipient has been registered in DirectMail. If this is the case and direct receiving is set to Y for the recipient, then the route over the POP/SMTP Server will not be taken but instead the email will be copied directly to the inbox of the recipient. This is considerably quicker and means less CPU loading.

The values allowed are:

Y Direct receiving is possible

N Direct receiving is not possible

Standard folder
Set the folder which should be defaulted when working with emails.

The values allowed are:

E Error list

I Incoming mails

L Last used folder

O Outgoing mails

S Sent objects

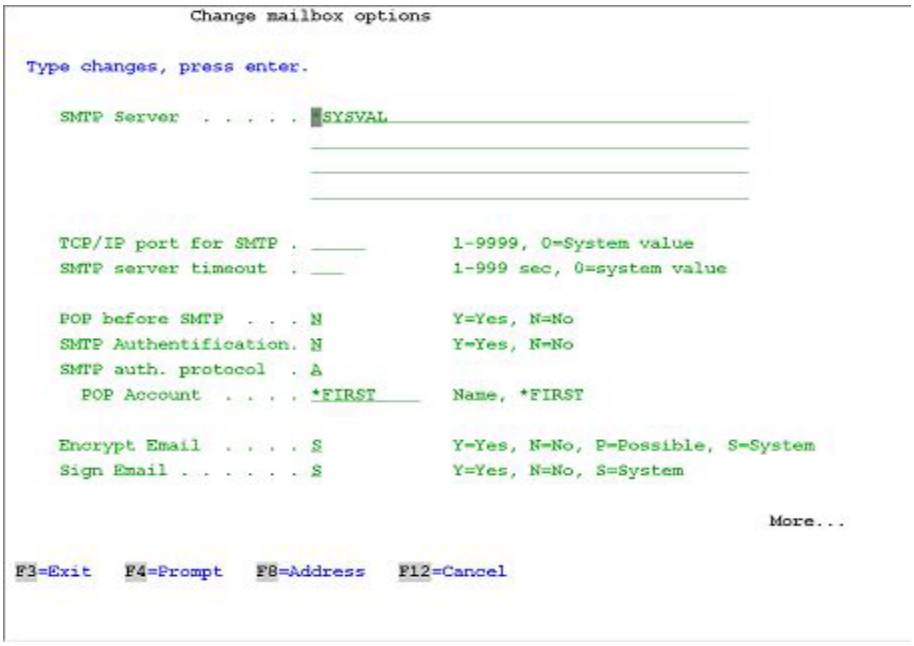
Empty "Deleted" folder on exit
Here you can set whether your emails that are filed in the “Deleted" folder should be finally removed when you exit DirectMail.

The values allowed are:

Y When exiting DirectMail emails will be removed from the “Deleted“ folder.

N When exiting DirectMail no emails will be removed.

B Emails that should be deleted require a confirmation when exiting DirectMail.



0019 – Change mailbox options, page 2

SMTP server

Here you specify the default value for the SMTP server, over which the emails of this mailbox should be sent from DirectMail/400.

Note:

The server address can be either an IP address or a name. The name must be compatible with the name server or the iSeries host table entries.

Example:

mail.toolmaker.de

204.12.179.1

The values allowed for this parameter are:

***SYSVAL** The SMTP server specified in the configuration of DirectMail will be used.

Name Enter the server name or IP address.

TCP/IP port for SMTP

Some SMTP Servers require a port other than the standard port 25 for the TCP/IP communication. This port can be customised in this parameter.

The values allowed for this parameter are:

***SMTP** The standard port 25 will be used for SMTP.

1-9999 Enter a port number

SMTP server timeout

Some SMTP servers may have a bad response time pattern. You can use this parameter to customise the time period that DirectMail will wait for a reply from the SMPT server.

The values allowed for this parameter are:

1-999 Number of seconds for the timeout

POP before SMTP

Some SMTP servers expect an identification to avoid spam mails before sending emails, i.e. mails sent by an unauthorised user over a SMTP server.

The values allowed for this parameter are:

Y Yes, POP before SMTP should be used.

N No, no POP before SMTP will be used.

SMTP login

Some mail servers require an authentication to avoid so-called spam-mails for sending emails. Specify whether you must log in on the server before sending emails.

The values allowed for this parameter are:

Y Yes, SMTP login will be required

N No, SMTP login will not be required

SMTP login procedures

Here you can specify which login procedures should be used for sending emails.

DirectMail Version 1.44 and higher supports SMTP authentication.

The values allowed for this parameter are:

A Automatic detect (unencrypted)

L Login (unencrypted)

P PLAIN (unencrypted)

S PLAIN incl. Password (not encrypted)

Note

SMTP servers (mail distribution) do not require a login with user/password for sending emails. As a consequence, email spammer misuse such SMTP servers for distributing their mails.

A way of avoiding this is to use the ESMTP protocol (same TCP/IP Port 25). This protocol supports the login on the SMTP server with the user/password comparable as with POP.

To transmit the password there are different procedures. DirectMail supports the popular protocols "LOGIN" and "PLAIN". In order to activate this login in DirectMail, the following entries must be specified in the mailbox:

```
SMTP Login. . . . Y            Y=Yes, N=No

SMTP Login procedure. P                P=PLAIN, L=LOGIN,
                                A=AUTO

POP Account  . . . . *FIRST        Name, *FIRST
```

DirectMail can automatically determine the possible login procedure. Therefore the default value is AUTO. Only in certain cases is it necessary to specify the procedure to be used.

With the MailServer of the Schlund company (auth.mail.onlinehome.de) for example, a PLAIN protocol is used which differs from the standard. In this case the S=SCHLUND value can also be entered. (Values can be retrieved using F4)

The POP account serves to determine the necessary user/password for the SMTP server.

Should POP and SMTP user/password not be identical, a DUMMY (deactivated) POP account can be used for the SMTP registration.

POP account

When POP before SMTP is set to Yes, a POP account must be specified here, with which the user will identify to the SMTP server.

The values allowed for this parameter are:

***FIRST** The first POP account of this mailbox will be used

Name The POP account with the specified name will be used

Encrypt email

With this setting you configure the general procedure as to whether e-mails that are sent by DirectMail should be encrypted. This can be changed depending on each e-mail transaction.

The values allowed for this parameter are:

N Emails will not be encrypted

Y Emails will be encrypted

M The encryption is possible, the email will be sent encrypted with the certificate existing.

S The setting from the DirectMail-Configuration will be used.

Sign Email

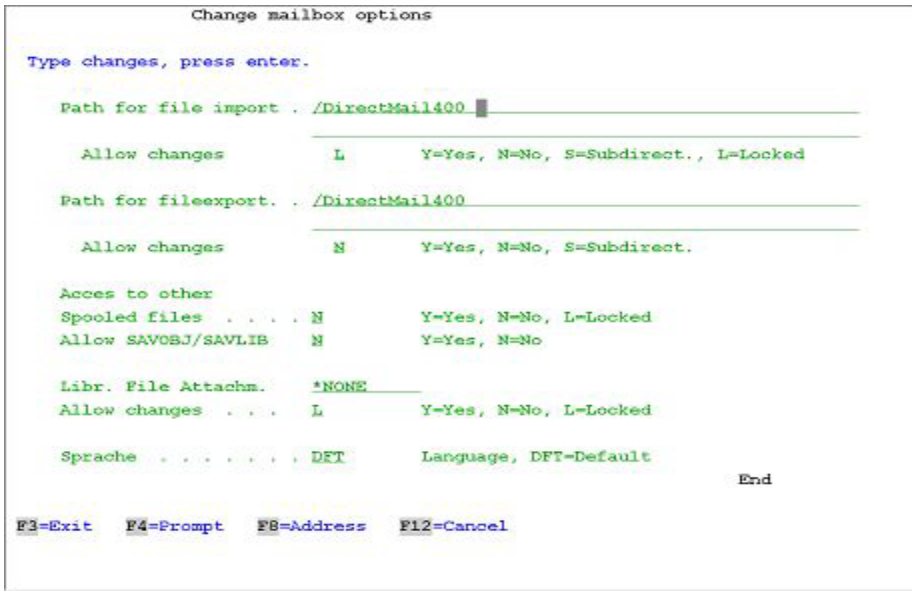
DirectMail also supports the digital signature of e-mails in order to ensure their authenticity.

The values allowed for this parameter are:

N Emails will not be signed

Y Emails will be signed.

S The setting from the DirectMail-Configuration will be used.



0020 – Change mailbox options, page 3

Path for file import

This is the path from the integrated file system of iSeries (IFS), from which the PC files can be imported as an attachment to an email to be sent.

Allow changes

Here you can specify how the user may access the IFS:

The values allowed are:

Y Changes of the directory name are permitted, i.e. the user can also import files from other directories on the same, lower or higher level.

N The user may import files only from the set directory.

U The user may import files from those directories that are created on a lower level within the structure.

S The import function is blocked.

Path for file export

This is the path from the integrated file system of iSeries (IFS), in which you can export PC files received as attachments of incoming emails.

Allow changes

Here you can specify how the user may access the IFS:

The values allowed are:

Y Changes of the directory name are permitted, i.e. the user can also export files to other directories on the same, lower or higher level.

N The user may export files only to the set directory.

U The user may export files to those directories that are created on a lower level within the structure.

Access to third-party print output

Here you can specify whether the user may send only his own spoolfiles or may use spoolfiles of other users as well.

The values allowed are:

Y The user may also send spoolfiles from other users.

N The user may only send some spoolfiles.

S the sending of spoolfiles is blocked for this user.

Allow SAVOBJ/SAVLIB

Here you define whether the user may backup objects of your iSeries (files, programs, libraries, etc.) and send them as an email attachment.

Note: This function should only be permitted for authorised users, otherwise users can backup data from your iSeries and send them by email.

The values allowed are:

Y The user may backup and send objects.

N The user must not backup and send any objects.

Lib. File attachment

Here you define from which library the user may attach files.

Allow changes

Here you define, whether the user may send files also from other libraries than that specified.

Note: This function should only be permitted for authorised users, otherwise users can backup data from your iSeries and send them by email.

The values allowed are:

Y The user may send files from other libraries.

N The user must not send files from other libraries.

S The function for sending files is blocked for this mailbox.

Language

DirectMail is multi-lingual. By setting the language you can select the available languages for every user. The language keys to be used are analogous to the languages available in the system value QLANGID.

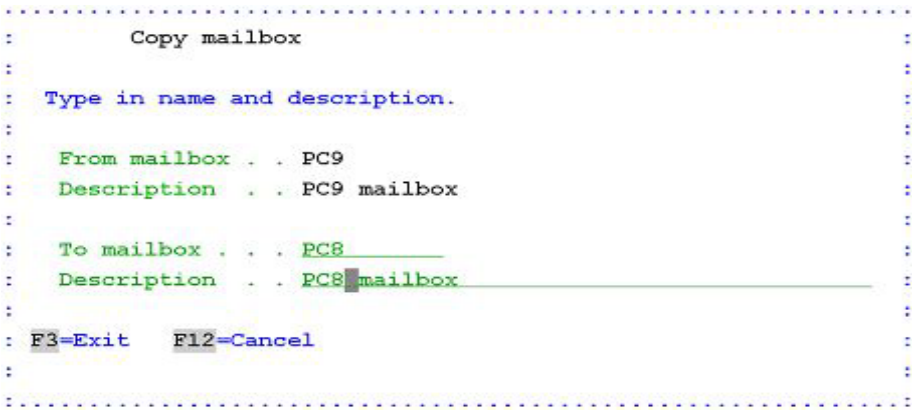
The values allowed are:

DEU, DES, ENG, ITA language key (can be called by using F4)

DFT Use of the language entered as default value with the installation.

5.2 Copy mailbox (Option 3)

Existing mailboxes can be copied, in order to create mailboxes for new users with settings equal to existing mailboxes.



0021 – Copy mailbox

To mailbox

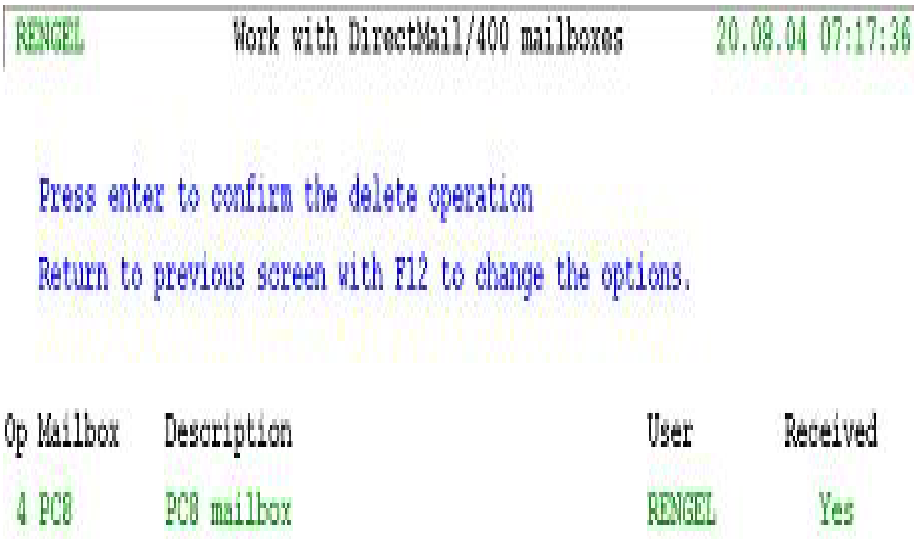
Enter the name of the mailbox to be created. No other mailbox must exist with this name.

Description

Here you can enter the text description of the mailbox.

5.3 Delete mailbox (Option 4)

Mailboxes no longer required can be deleted along with their content.

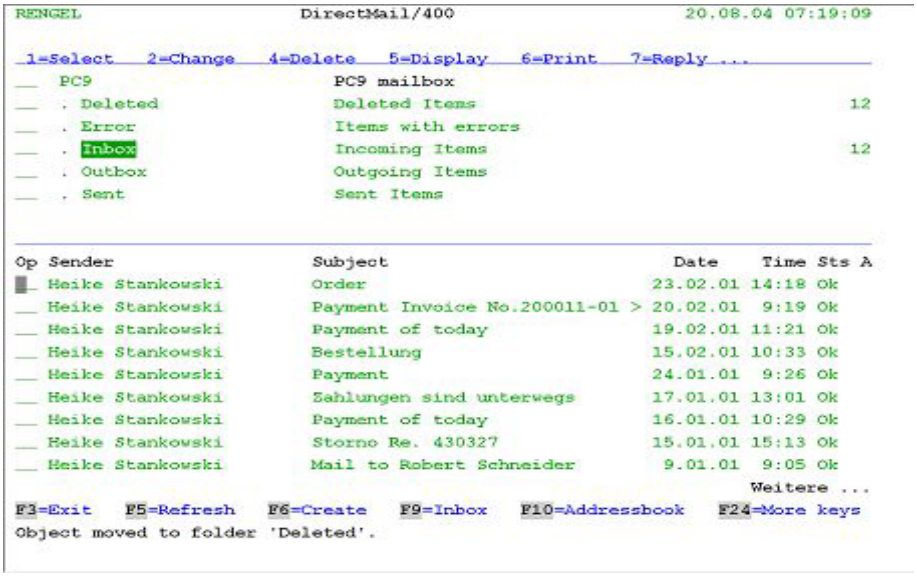


0022 – Delete mailbox

For deleting mailboxes you must explicitly confirm the option again with **Enter** or cancel with **F12**.

5.4 Mailbox: work with emails (option 8)

Use this option to branch to your mailbox for handling your emails.



0023 – Mailbox display

The options available here are described in chapter **Work with emails** (Option 7).

5.5 Email address (option 9)

Every mailbox with a filed user contains address information that can be administrated.

0024 - Email address

The filed address information can be called by all DirectMail users through the user address book.

First name
The email user's first name.

Last name
The email user's last name.

Email
The email user's email address.

Company
The email user's company.

Title
The email user's title.

Department
The email user's department.

Private address
Flag for private address.

The values allowed are:

J private address

J No private address

Telephone
The email user's business telephone number.

Mobile
The email user's mobile phone number.

Fax
The email user's fax number.

Private
The email user's private telephone number.

Street
The email user's street.

Postcode
The email user's post code.

Country
Country code

Nation
Country code

Place
The email user's place.

5.6 Email accounts (option 10)

For sending outgoing emails no configuration is necessary. In order to receive emails, you must link an account with at least one mailbox.

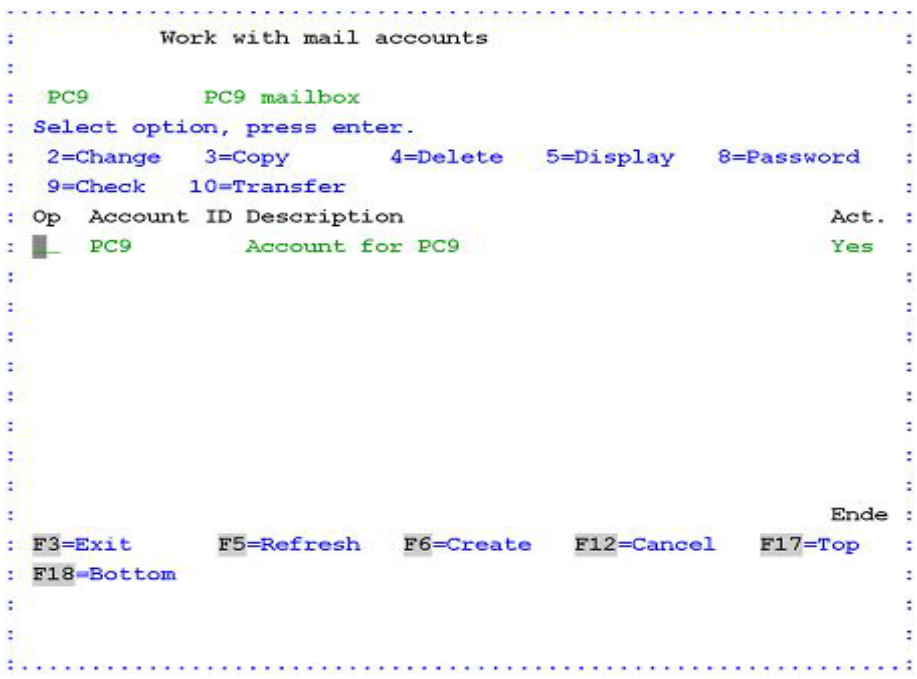
In the email account you define the access data for the polling of the incoming emails with your provider.

You can only use one mailbox with one account, if you have only one email address for your company (e.g. mustermann@t-online.de). In this case incoming emails will be received on one workstation.

Note: Please note that you can get various email addresses with your provider, e.g. T-online, in which you can set so-called co-user numbers for further employees and assign alias addresses to these co-user numbers. In this way you can get, for example, email addresses such as "hmeier.mustermann@t-online.de", fschulz.mustermann@t-online.de", etc. When using T-Online you must acquire the "Comfort package" for this function, which enables the polling of T-Online mails via POP3 accounts. Other mail providers offer this as a standard.

In many companies, providers are used who support several email accounts, so that as a rule a mailbox and an email account can be assigned to every user.

DirectMail offers the possibility of assigning as many email accounts to a mailbox as you like. This is useful for instance, when you change the provider and you want to poll emails from the new as well as from the old provider. A further use is with the withdrawal of employees, i.e. you can assign their email accounts to other users. With this, you must not make any changes with your email provider.



0025 – Work with mail accounts

Options

2=Change
You can change the mail account information here.

3=Copy
For copying an email account, e.g. for a new email address. See chapter **Copy email account (option 3).**

4=Delete
For deleting an email account. See chapter **Delete email account (option 4).**

5=Display
For displaying the information of a mail account. See chapter **Display email account (option 5).**

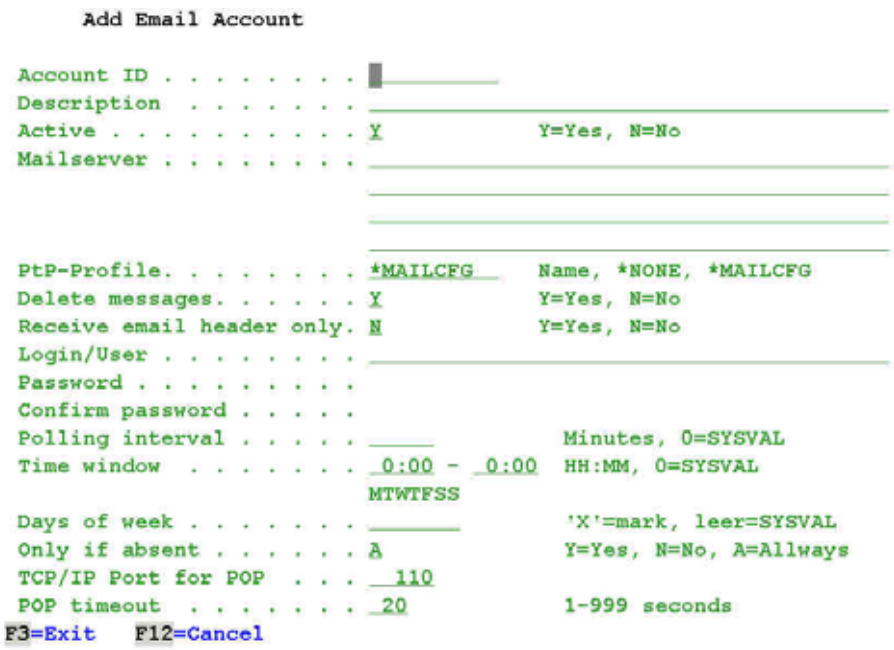
8=Password
With this you can change the password for the access to your emails. See chapter **Change email account password (option 8).**

9=Check
For the manual checking of servers, user ID and password. See chapter **Check email account (option 9).**

10=Transmit
For transmitting new emails. See chapter **Transmit emails (option 10).**

5.6.1 Add email account (F6) (F6)

For every email address an email account is added to the mailbox of a user.



0026 – Add email account

Account ID
This can be assigned freely.

Description
Text description of the account, e.g. T-Online, Provider A, etc.

Active
With this you specify whether this account is an active account or is not used, e.g. in case of an email address no longer valid, an email address not yet set up, a currently inactive email address, etc.

The values allowed are:

Y The mail account is active; mails can be received via this account.

N The mail account is not active; no mails can be received via this account.

Mail server
Enter the name of your mail server over which you receive your emails. You can get the name from your system administrator or your provider. With T-Online it reads "pop.btx.dtag.de", with other providers it reads e.g.: "smtp.www-service.de".

The special value ***LOCALHOST** allows the direct reading of emails from the mail server of the iSeries. In this case no user password is needed and the route over the POP server will not be taken.

PtP profile
Point-to-Point-Profile. Here you specify in one of the subsequent versions of DirectMail which profile will be used to access the provider.

The values allowed are:

Name The name of a valid PtP profile

***NONE** No PtP profile is available for this account

***MAILCFG** The PtP profile specified in the configuration will be used

Delete messages

Specify whether your emails should be deleted on the provider server after they have been received.

Note: After this value has changed from N to Y, all messages already received will be deleted from the provider server.

The values allowed are:

Y The mails will be deleted after receipt

N The mails remain stored on the provider server

Note: Please note that with Option N the mails use storage space on the provider server and that the storage space available for you may be used up eventually. When the storage space available for you is exhausted, you can no longer receive any emails, the sender will receive an email with the corresponding error message.

Only receive email header

With this you specify when you only want to receive the email header. Then only the header information of the email will be transmitted, but not the content. This can be important when you get large emails and would first of all like to get an overview of the incoming information. It will basically be a few lines of text that you receive because the mail server sends a specific amount of bytes whether or not this includes just the header or text.

The values allowed are:

Y Only the email headers will be received

N The complete emails incl. text and attachments will be received

Login/User

Every email account has a user as well as a password, which is required in order to guarantee the proper safety. You can obtain the user name from your system administrator or your provider. With ***LOCALHOST** in the Mail Server parameter it is not necessary to enter a password.

Confirm password

Enter the password related your user ID here. Both inputs will be checked against each other; if they do not correlate you will receive an error message.

Confirmation

Re-enter password for confirmation.

Polling interval

DirectMail is able to check your email accounts for incoming mails in preset intervals. Specify the time intervals in which this should occur.

The values allowed are:

Minutes Any value, every x minutes the account will be checked for incoming emails.

0 The system value from the DirectMail configuration will be used

Time window

Specify here, within which time window the check should take place in the defined interval. With this you avoid e.g. that your emails will be checked overnight and unnecessary connection fees are produced.

The values allowed are:

0:00 - 24:00 Time from to

0 The system value from the DirectMail configuration will be used

Days of week

Mark here on which day of the week the check should be carried out. By doing this you can, e.g., exclude checks at the weekend saving connection costs.

The values allowed are:

X Mark each day (every place corresponds to a day from Monday to Sunday) on which the mail account should be checked.

The system value from the DirectMail configuration will be used.

Only when present

Here you can specify whether the account should also be checked when you are not present.

The values allowed are:

Y The account will only be checked when the user is present

N The account will be checked when the user is not present.

I The account will always be checked independent of presence/absence.

TCP/IP port for POP

The default value is 110.

POP time out

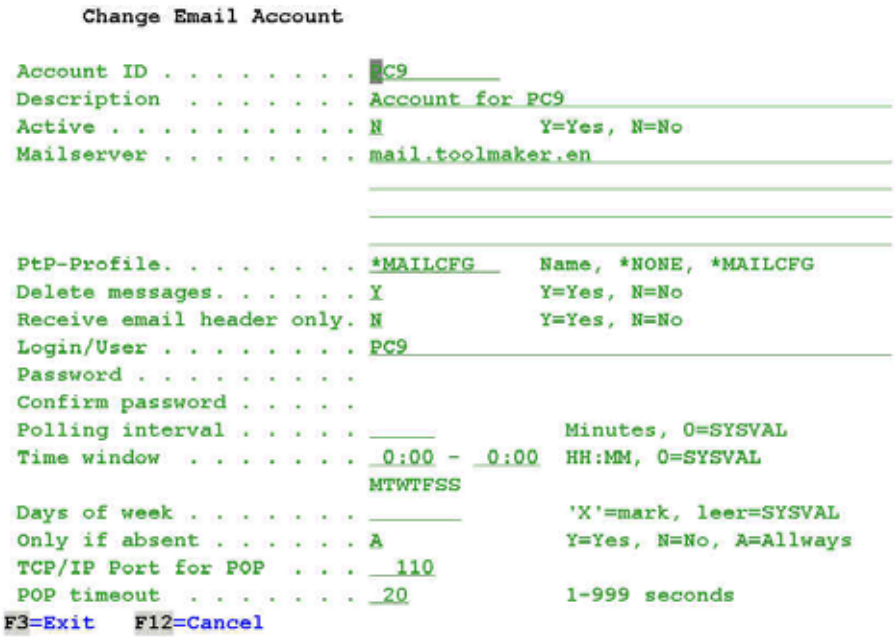
The values allowed are:

1 – 999 Seconds

The default value is 20 seconds.

5.6.2 Change email account (option 2)

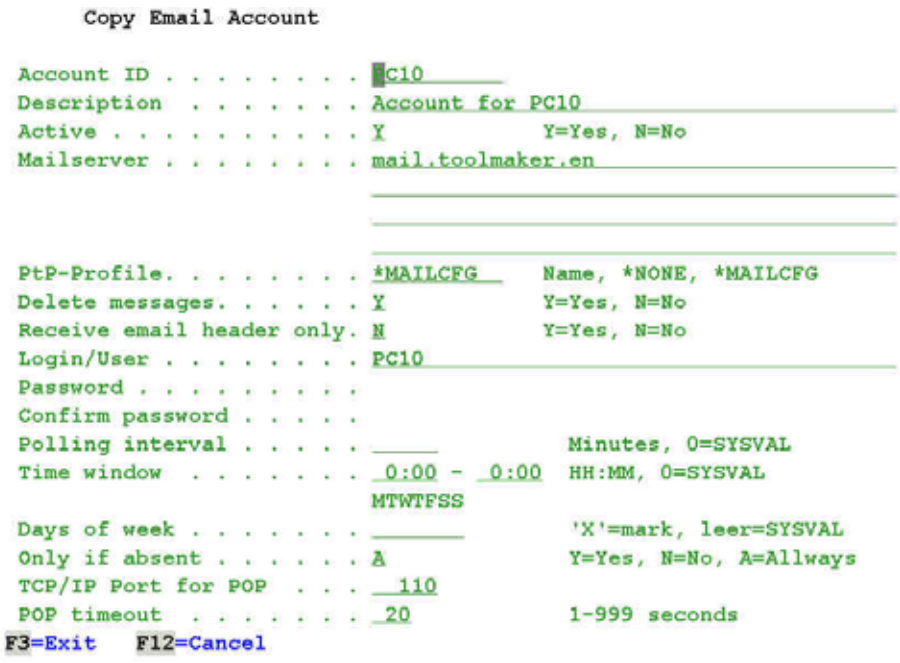
Here you can change the settings of your mail account.



0027 - Change mail account

5.6.3 Copy email account (option 3)

Here you can copy an email account to another account saving the time of entering data.

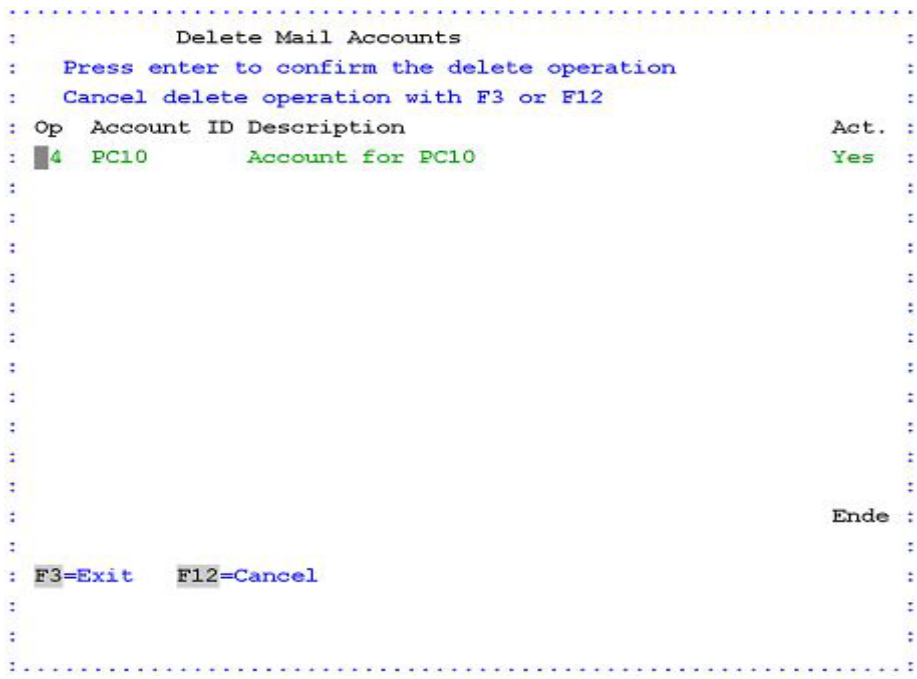


0028 - Copy email account

Change the values analogous to the entry options described in the chapter **email accounts (Option 10)**Fehler! Es wurde kein Textmarkenname vergeben..

5.6.4 Delete email account (option 4)

With this you can delete existing mail accounts.

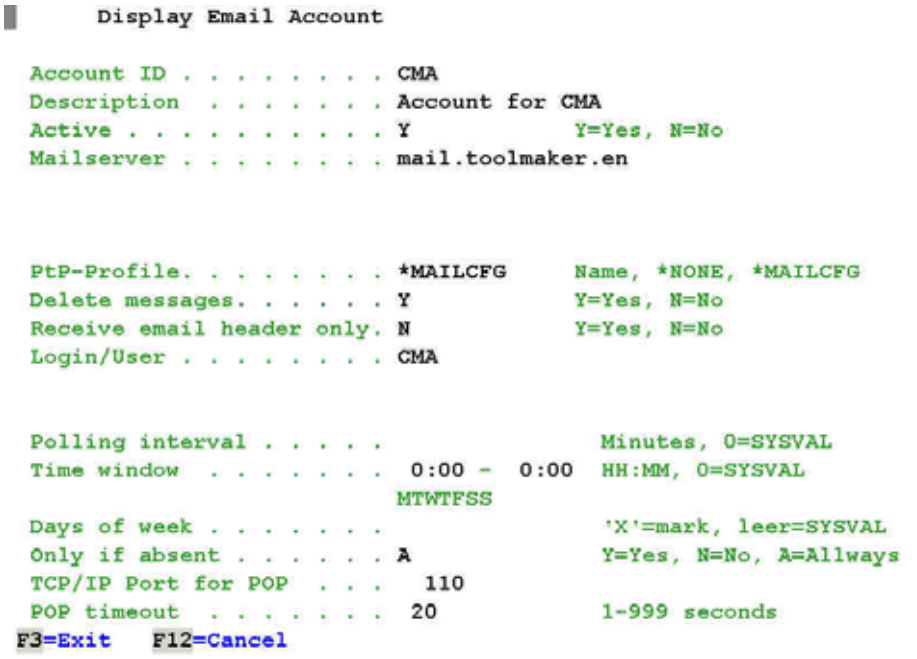


0029 - Delete email account

Confirm your deleting with the enter key, or return to the previous option with F12.

5.6.5 Display email account (option 5)

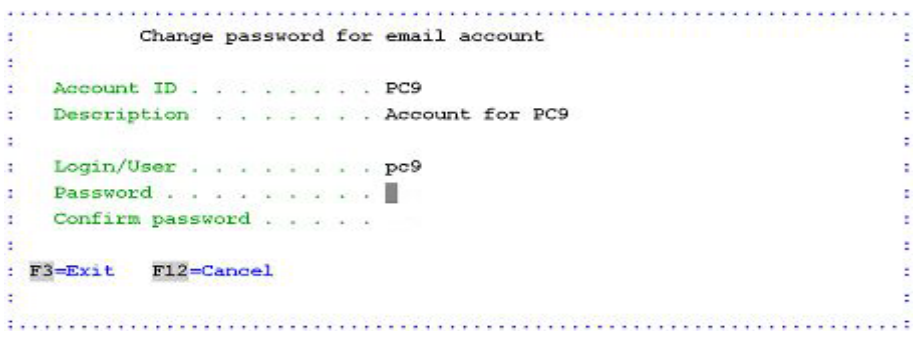
This option displays the data of the mail account; a change of data is not possible.



0030 - Display email account

5.6.6 Change email account password (option 8)

When the password with your provider changes, you must apply this change in DirectMail in order to continue to poll the mails for this account. This is e.g. necessary, if the password is changed or has expired on iSeries.



0031 - Change password for mail account

Password
Enter the new password here.

Confirmation
Enter the new password again for validation.

5.6.7 Check email account (option 9)

Use this option to check your email server, user ID and password.

5.6.8 Transmit emails (option 10)

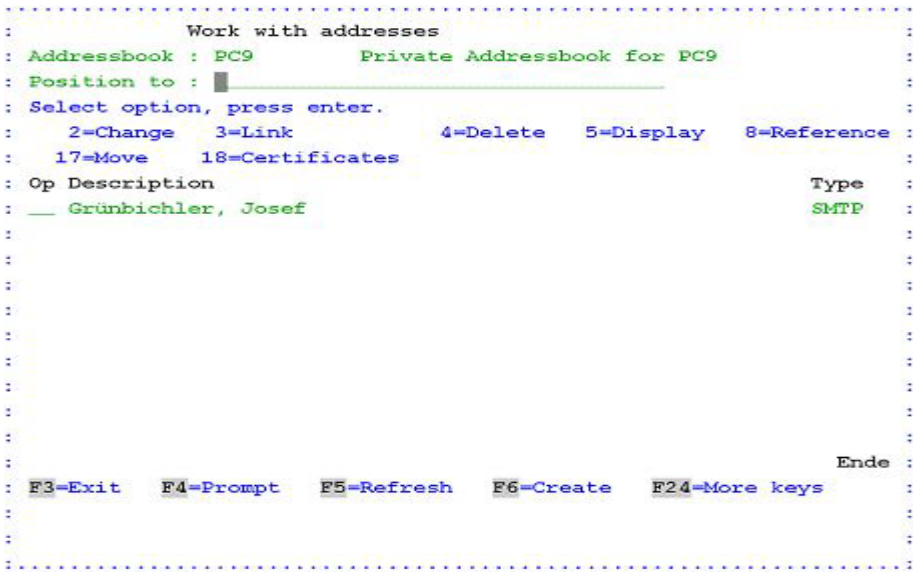
Use this option to you transmit emails not yet transmitted to your provider.

5.7 Address book (option 12)

The address book serves to make available frequently used email addresses to the author of the emails. DirectMail differentiates between external address books, system address book, user address book and mailbox address books. The decision, where an address should be recorded, is facilitated by DirectMail, since you can

move an entry at any time or reference another address book.

request the address book function getting an overview of your user address book.



0032 - Private address book

Options

2=Change

Use this option to change information about the address. See chapter **Change address book entry (Option 2)**

3=Link

For linking an address book entry to another address book. See chapter **Link address book entry (Option 3).**

4=Delete

For deleting an entry. See chapter **Delete address book entry (Option 4)**

5=Display

For displaying an entry. See chapter **Display address book entry (Option 5).**

8=Reference

Displays the links of a physically created address to various address books. See chapter **Display address reference (Option 8).**

17=Move

For moving an entry into another address book. See chapter **Move address book entry (Option 17).**

18=Certificates

For administrating the digital certificates of the address book entries. See the chapter on **Certificates (Option 15)**.

Special function keys

F4=Prompt

Displays a selection of the available folders in the address book.

0033 – Special function keys

F10=All

With this function key you can display all entries in all subfolders of the address book, which can make the search for entries easier.

F13=Standard

When you have selected a folder and want to have it displayed always when calling the address book, you can set this function with this function key.

5.7.1 Add address book entry (F6)

Using **Function key 6** you can add a new entry to an address book:

You must decide whether you want to create an address entry or a mailing list. An address entry is a single email address to which you can sent outgoing mails. A mailing list serves for sending mails to several email addresses without having to enter each recipient individually.

So you can e.g. create an internal mailing list AD for all employees from the Accounting Department or an external mailing list SP for all Sales Partners. The composition of the mailing list is left up to you.

0034 - Add address book entry

Options

1=Address book entry
Use this option to create an address book entry, i.e. a physical email address in an address book. See chapter **Add address book entry (Option 1)**

2=Mailing list
Use this option to compose a mailing list, in which you can reference address entries in turn. See chapter **Add address mailing list (Option 2).**

The type of entry that you want to change governs the follow-up screen. If you highlight an address with **2** the address to be changed will be displayed, otherwise list name and text of the mailing list.

5.7.1.1 Add address book entry (option 1)

With option **1** you create an address book entry in an address book:

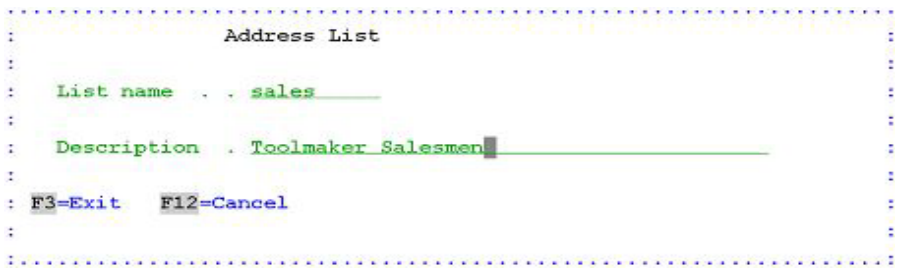
0035 - Address book entry

Enter the address information of the new created entry; please make sure in particular that you enter the email address correctly so that the email can reach the recipient. If the email address does not exist globally, you will receive an error message after failed transmitting attempts. This could be a problem, if the email address entered incorrectly does exist because then an unauthorised person may receive confidential data from you.

Note:
When you enter "Y" with **Private address**, the created address will only be shown to you and not to other users.

5.7.1.2 Add mailing list (option 2)

If you have to send emails to more than one recipient simultaneously, you best use a mailing list. In this mailing list, the desired address book entries will be referenced. When sending you must no longer enter single addresses but only the name of the mailing list.



0036 - Mailing list entry

List name
Name of the mailing list.

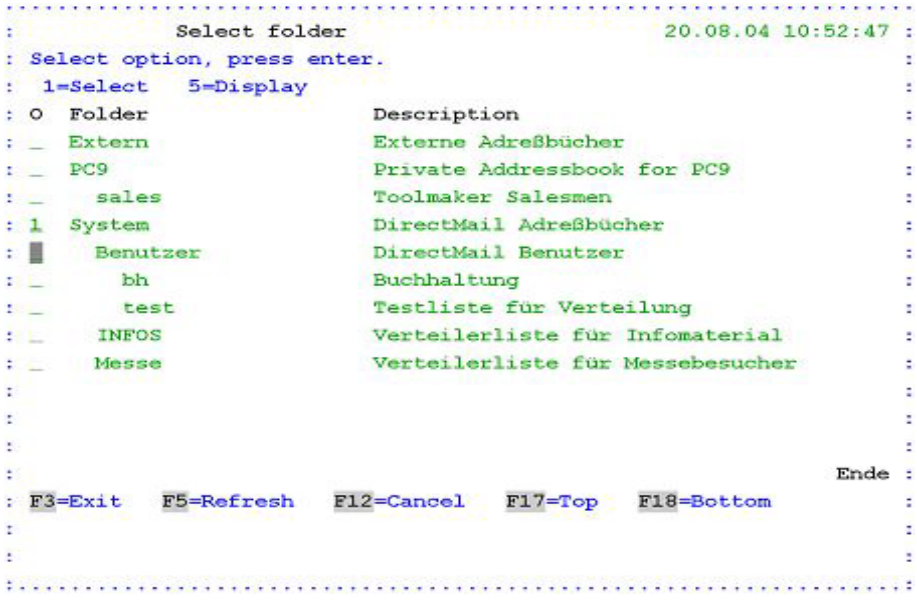
Description
A description of the mailing list.

5.7.2 Change address book entry (option 2)

Dependent on the type of entry, address book or mailing list, you will see the same screens as when creating, but each filled with data which can be written over.

5.7.3 Link address book entry (option 3)

In order to include an address in multiple address books, you do not need to enter it repeatedly. With the DirectMail link function an existing address can be referenced in multiple address books. This means that in subsequent address books there is a reference only to the physical address. This has the advantage that the address is available in multiple address books, but must be administrated only centrally.



0037 - Link address book entry

Options

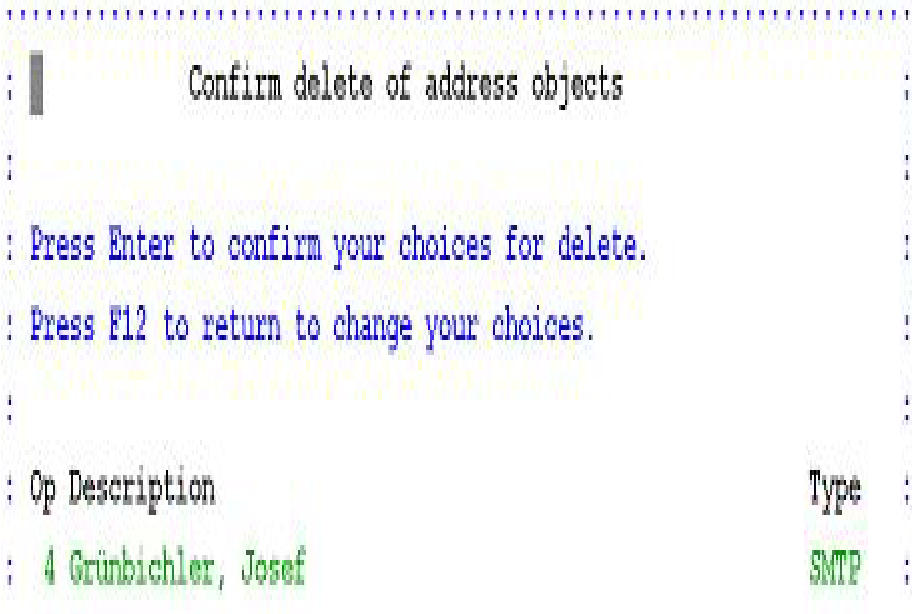
1=Select
Use this option to select the address book with which the physical address should be linked.

5=Display
Use this option to display or hide the structure of the selected entry.

Use Option **1** to select the address book with which you want to link the address.

5.7.4 Delete address book entry (Option 4)

Warning: After deleting you can no longer use this address. You may just move the address first to an unused folder for a “temporary storage“.



0038 - Delete address book entry

Press the **Enter key** for confirming the deleting, or **F12** for returning to the previous screen.

5.7.5 Display address book entry (option 5)

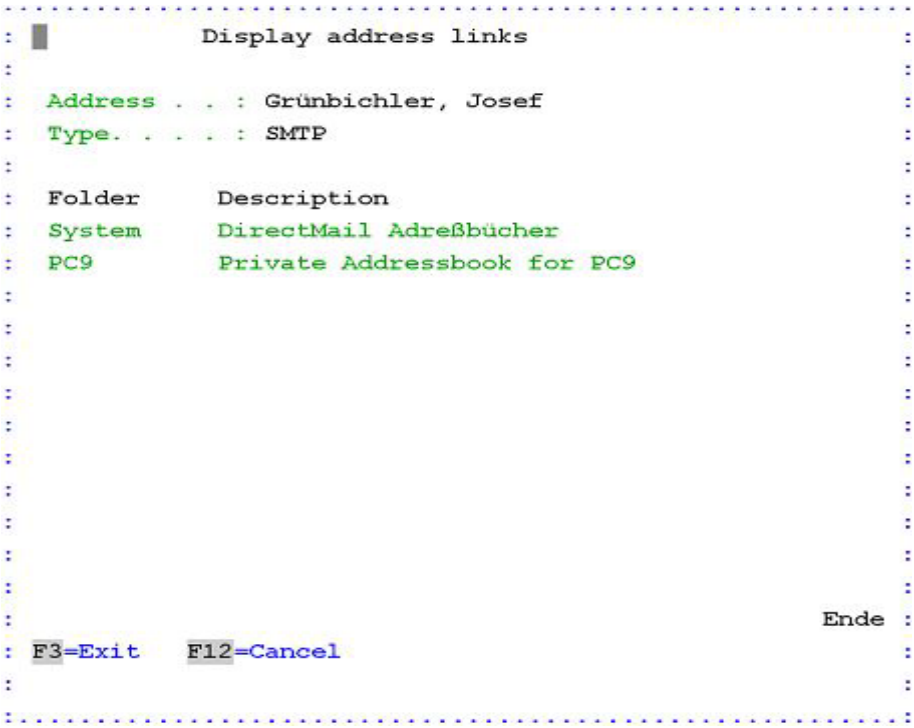
Use this option to display the selected entry.

0039 - Display address book entry.

5.7.6 Display address reference (option 8)

Here you see in which address books an address book entry created physically only once is referenced.

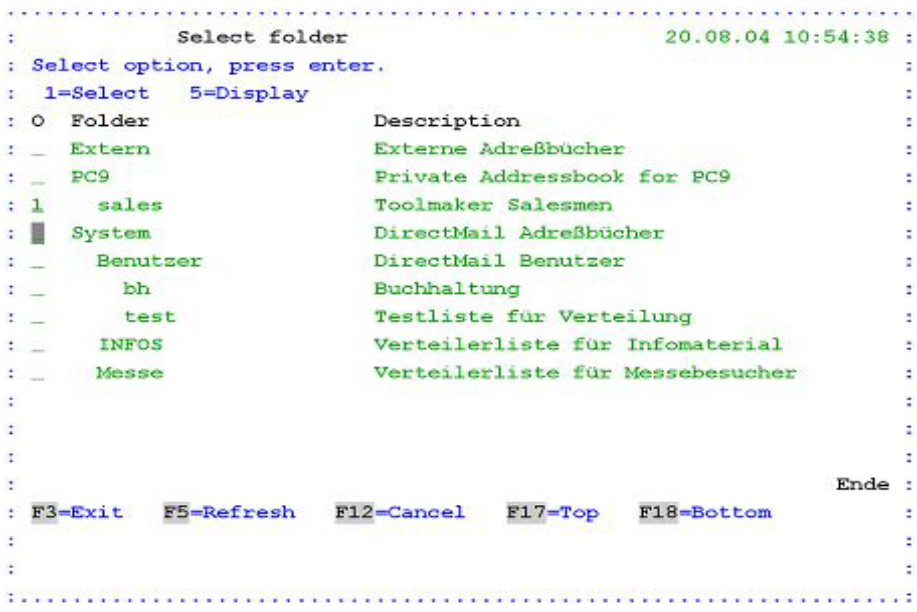
Each reference of an address book entry means the inclusion of a copy of the entry into another folder. This helps to minimise the administration work for an address and makes it available for other employees in their address books.



0040 - Display address book references

5.7.7 Move address book entry (option 17)

You cannot just reference an entry; you can also move it physically. When e.g. the address book, in which entries are filed, should be deleted together with a mailbox, it may be appropriate in some cases to move the addresses into another address book in order not to loose them.



0041 - Move address book entry

Options

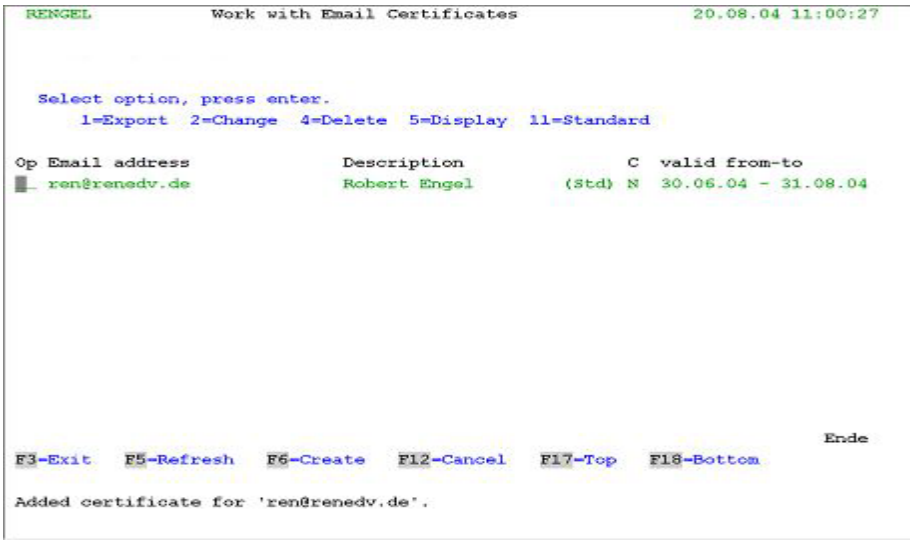
1=Select
Use this option to choose the address book, into which the physical address should be moved.

5=Display
Use this option to display or hide the structure of the selected entry.

Use Option **1** to select the address book into which you want to move the address.

5.7.8 Certificates (option 18)

Within the address book, certificates for a recipient can be processed/imported using option 15.



0042 – Certificates

Options

1=Export
Use this option to export certificates to IFS directories.

2=Change
Use this option to change the description of the certificate.

4=Delete
Use this option to delete a certificate.

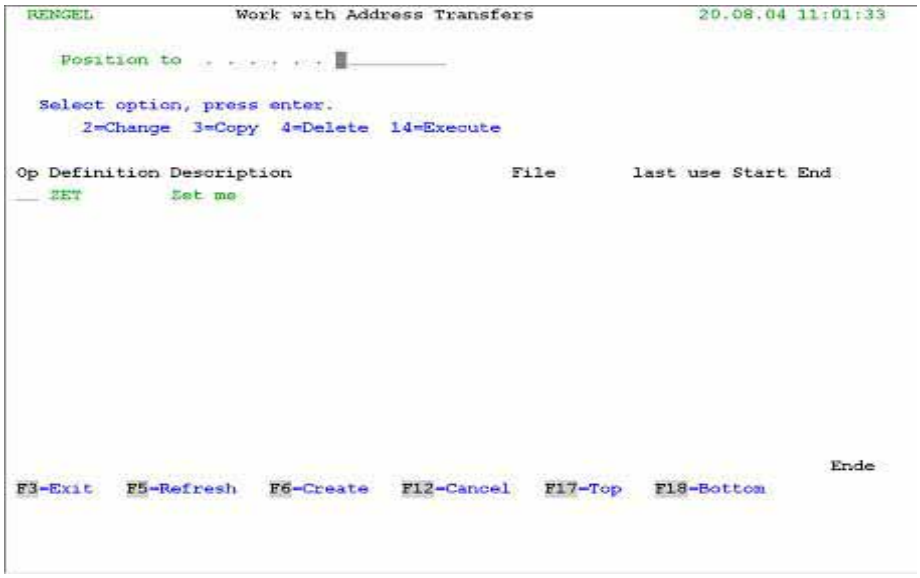
5=Display
Use this option to display the contents of the certificate.

0043 – Display spoolfile certificates

11=Standard
Use this option to convert an alternative certificate into a standard certificate.

5.7.9 Copy address book from database

DirectMail provides the possibility of copying data from your own database to the DirectMail address book. This is done using Option 8 from the DirectMail main menu.



0044 - Copying addresses from a database

Options

2=Change
Use this option to change the created entry.

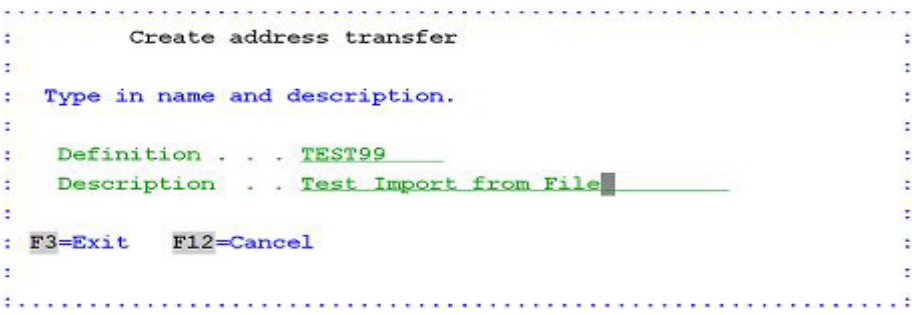
3=Copy
Use this option to copy the copy definition and to apply subsequent changes to the copy.

4=Delete
Use this option to delete a copy definition.

14=Execute
Use this option to execute the copying of the address data from your database. Existing address entries will be written over in this process.

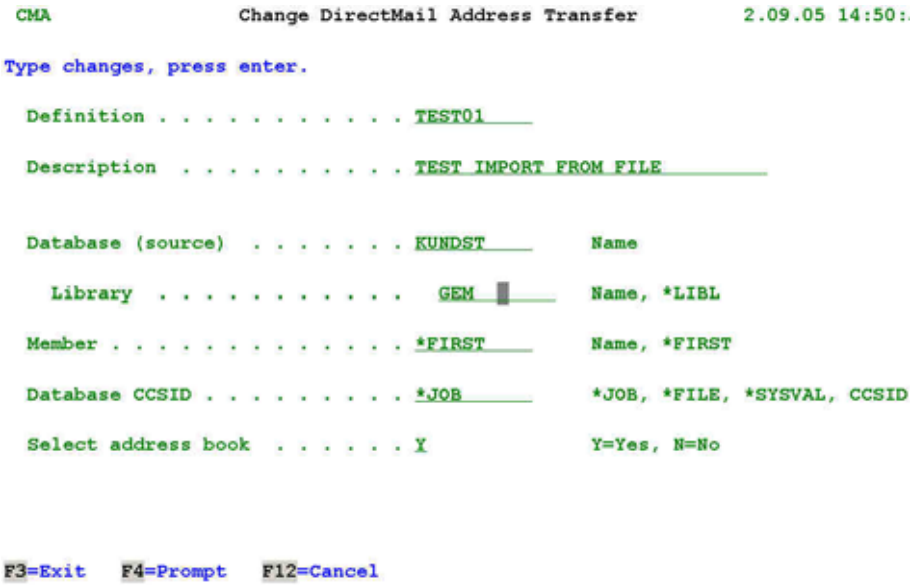
Function keys

F6=Create
Using this function key you can create a new copy definition. You will receive the following screens for entering the definition name and a description.



0045 - Create copy path

Press the function keys **F3** or **F12** to exit or the enter key to confirm the new definition. You will then receive the subsequent screen, which is more or less identical to the screen when changing a copy definition.



0046 - Create/change copy path

Input fields

Definition
Here you see the name of the description; you can still change this description when creating a definition.

Description
The description of the copy path.

Databse (source)
Address file from where the data is copied.

Library
Library where it is stored.

Member
member to be used.

CCSID of database

Allows you to enter the CCSID for the database file. Imported data is translated from the CCSID for the database file to the CCSID for the DirectMail server (CFGDIRMAIL).

The values allowed are:

***JOB** The CCSID for the job definition is used.

***FILE** The CCSID for the database file is used.

***SYSVAL** The system CCSID is used.

***CCSID** Enter the CCSID for the database.

Select address book

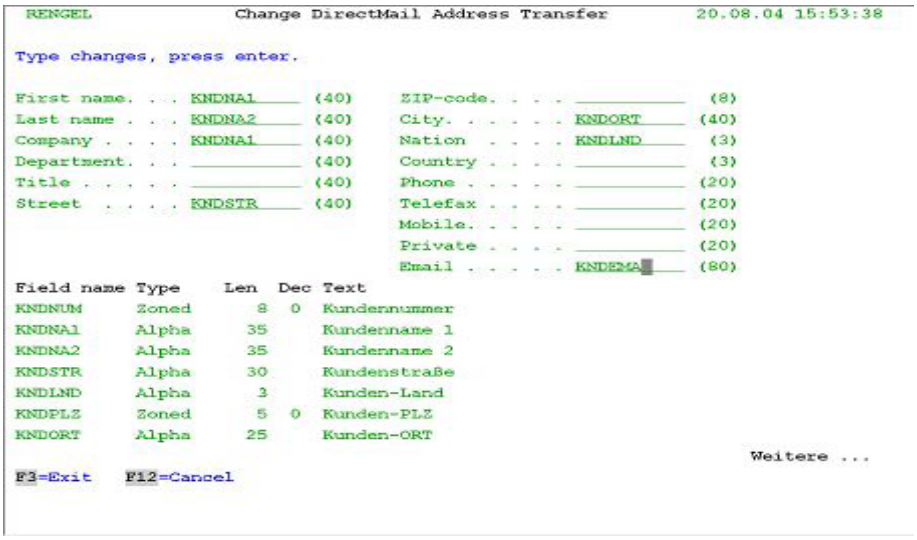
Enter **Y** to select an address book, or **N** to continue to use a preset address book.

Press the enter key to proceed. When you have entered Y for the address book option, you will receive the subsequent screen for the selecting an address book / a mailing list:

```
:                Select folder                      20.08.04 15:53:12 :
: Select option, press enter.                                         :
:  1=Select   5=Display                                               :
: O  Folder                 Description                               :
: _  Extern                 Externe Adreßbücher                       :
: _  Privat                 Private Adreßbücher                       :
: _    FIDDY                Privates Adreßbuch für FIDDY              :
: _    PC0                  Privates Adreßbuch für PC0                :
: _    PC1                  Privates Adreßbuch für PC1                :
: _    PC2                  Privates Adreßbuch für PC2                :
: _    PC3                  Privates Adreßbuch für PC3                :
: _    PC4                  Privates Adreßbuch für PC4                :
: _    PC5                  Privates Adreßbuch für PC5                :
: _    PC8                  Private Addressbook for PC8               :
: 1    PC9                  Private Addressbook for PC9               :
: _      sales              Toolmaker Salesmen                        :
:                                                        Weitere ...  :
: F3=Exit   F5=Refresh   F12=Cancel   F17=Top   F18=Bottom             :
:                                                                     :
:                                                                     :
:.....................................................................:
```

0047 – Select address book

Use Option **1** to select the address book in which the copied addresses should be filed.



0048 – Specify address fields

Enter the fields from the area shown below, in which all fields of your selected files are contained, in the order above, in which you want the information to be copied to the address book and press the enter key.

0049 - Specify copy criteria

Specify the fields and match criteria according to which the data records are to be filtered from the source database to be received should be filtered into the address book and press the Enter key to save.

5.8 Incoming Mail Assistant (option 13)

Use Option **13** to go to the Incoming Mail Assistant. This will be described in detail in the chapter “Incoming Mail Assistant”.

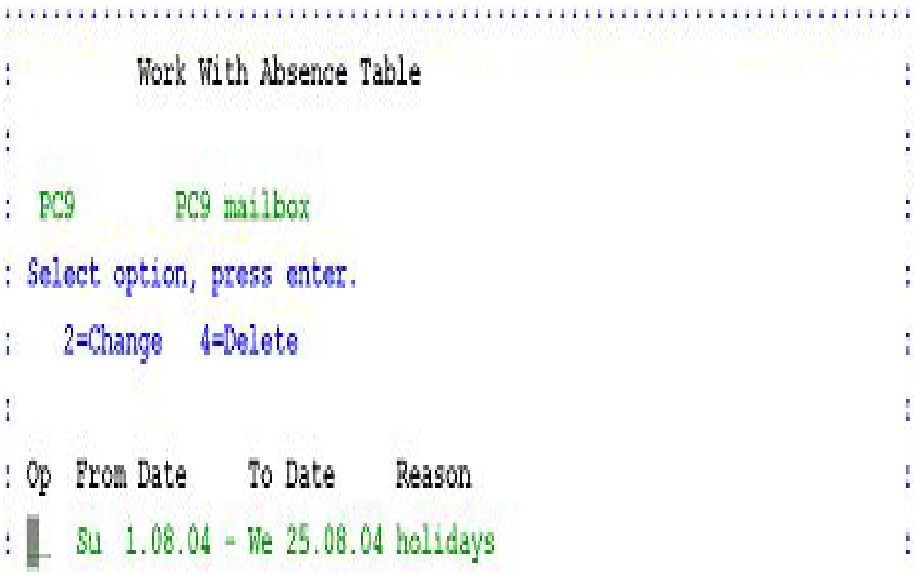
0050 - Incoming Mail Assistant

Start list at
Starts the display at the term entered here.

OP
Use one of the options above.

5.9 Absence (option 14)

DirectMail allows you to enter periods of internal absence. Together with the Incoming Mail Assistant you can provide the sender with an automatic reply when absent: e.g. "Your email to meier@test.de was received. Mr. Meier is on holidays until 14.09. Your email will be dealt with afterwards." The times of absence can be administrated with this option.



0051 - Absences

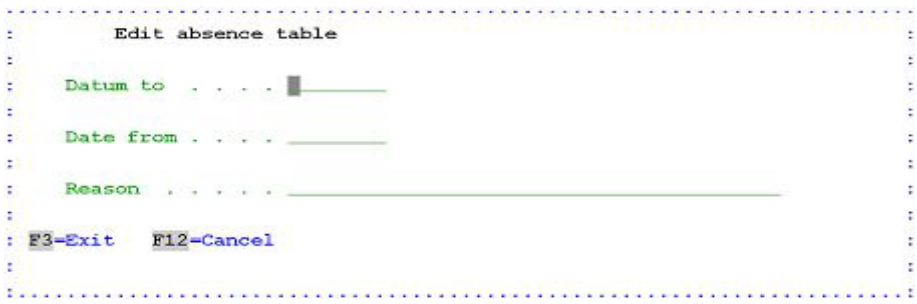
Options

2=Change
Use this option to change the created entry. See chapter **Change absence (Option 2).**

4=Delete
Use this option to delete an absence entry. See chapter **Delete absence** (**Option 4**)

5.9.1 Add absence (F6)

Using F6 you can add a new time period.



0052 - Edit absence entry

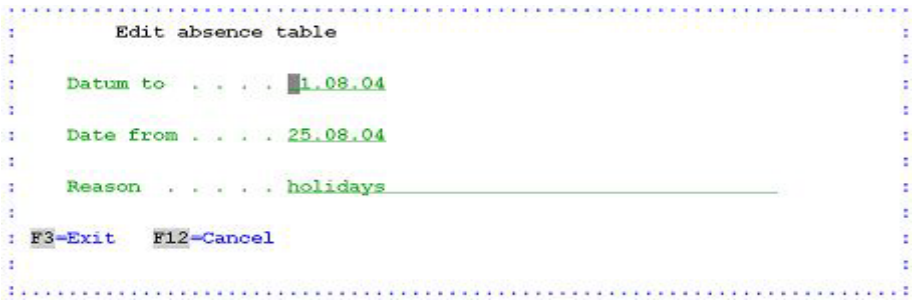
From date
Enter the date of the first day of absence

To date
Enter the date of the last day of absence

Reason
This is a text description, sent along with the reply to the sender of an email who has contacted you during your absence.

5.9.2 Change absence (option 2)

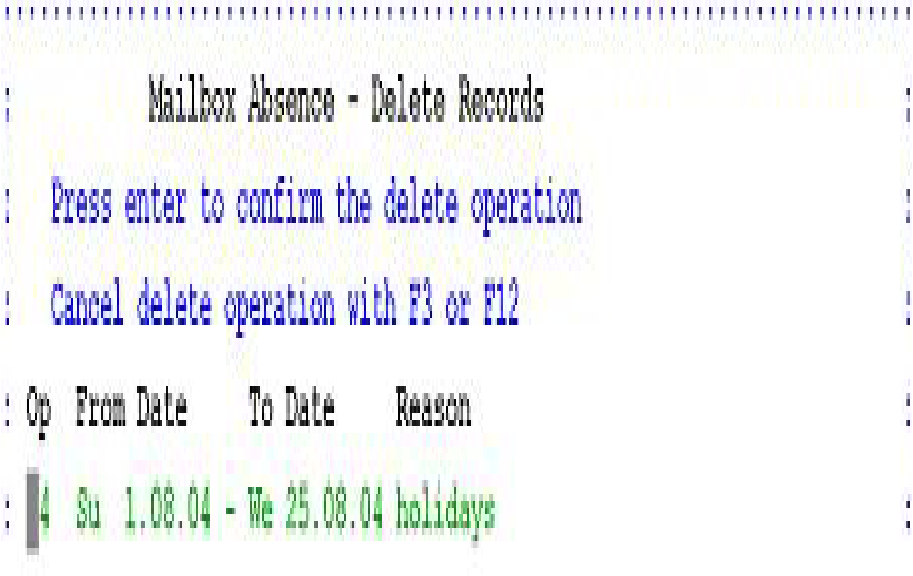
Using this function you can change an entry once created in order to e.g. change the period or reason for absence.



0053 - Edit absence entry

5.9.3 Delete absence (option 4)

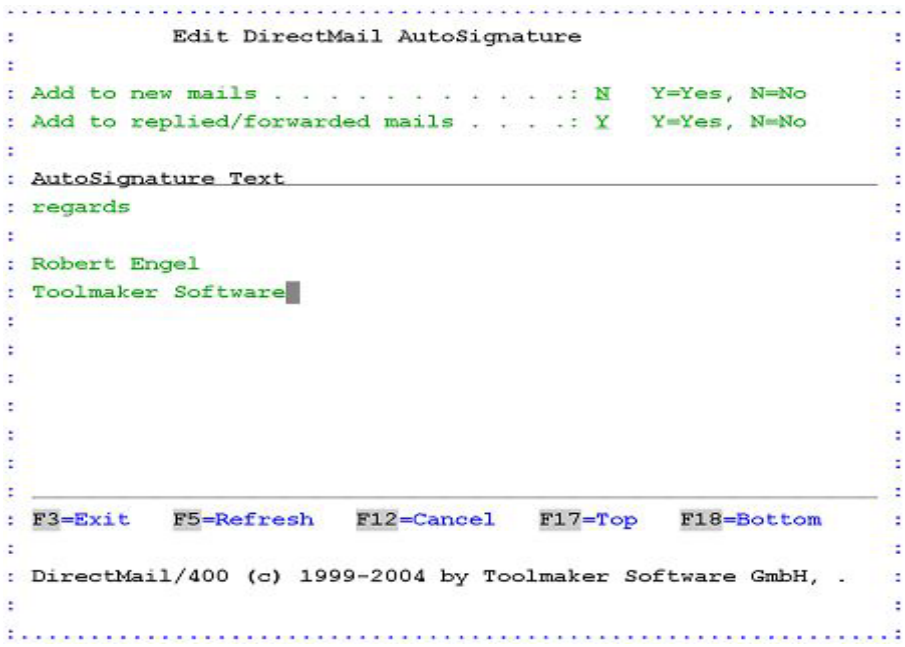
Using this function you can delete an entry once created, if e.g. the absence does not occur.



0054 - Delete absence

5.10 Edit AutoSignature (option 15)

With this option you go to screen for editing the signature text that will be sent with every email.



0055 - Edit AutoSignature

Options

Attach to new mails

Here you specify whether the text should be attached automatically to every new email.

The values allowed are:

Y The signature will be attached to every new email.

N The signature will not be attached automatically to every new email. The text can be attached to the email using F15.

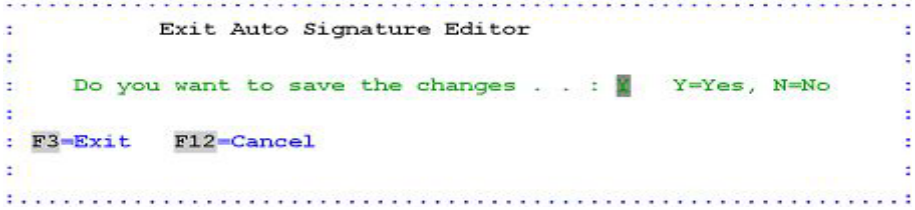
Attach when replying/forwarding

Here you specify whether the text should be attached automatically to every forwarded email and/or to replies.

The values allowed are:

Y The signature will be attached to every forwarded/answered email.

N The signature will not be attached automatically to every forwarded/ answered email. The text can be attached to the email using F15.



0056 - Exit AutoSignature Editor

Options

Save changes
Specify whether the entered text should be saved.

The values allowed are:

Y The changes will be saved

N The changes will be dismissed

5.11 Password (option 16)

Use this option to go to the screen for entering the password, when you want to protect your mailbox.

0057 – Define password

Options

Password for mailbox
Enter the desired password for accessing your mailbox. The mailbox password is saved temporarily for each job. Once a mailbox password has been entered correctly, you will not be prompted for it again for the duration of the job.

WARNING:
Remember the password. As with all passwords, without this you no longer have the possibility of accessing your mailbox. Only the user QSECOFR has the authority of resetting the password.

Confirm password
Enter your password again for validation.

Always ask for password
Here you specify whether the password is requested from all DirectMail users.

The values allowed are:

Y The password will be requested from every user when accessing the mailbox. So you can protect your mailbox more intensely, i.e. even the owner of the mailbox must enter the password before using it. This is useful when the mailbox owner has signed on, but wants to protect his mailbox from unauthorised access.

N The password will only be requested when a user other than the owner of the mailbox wants to access.

Password expiration interval

Enter the time interval in days, after which the password will expire. You will be prompted beforehand to change the password.

Here you specify whether the text should be attached automatically to every forwarded email and/or to replies.

The values allowed are:

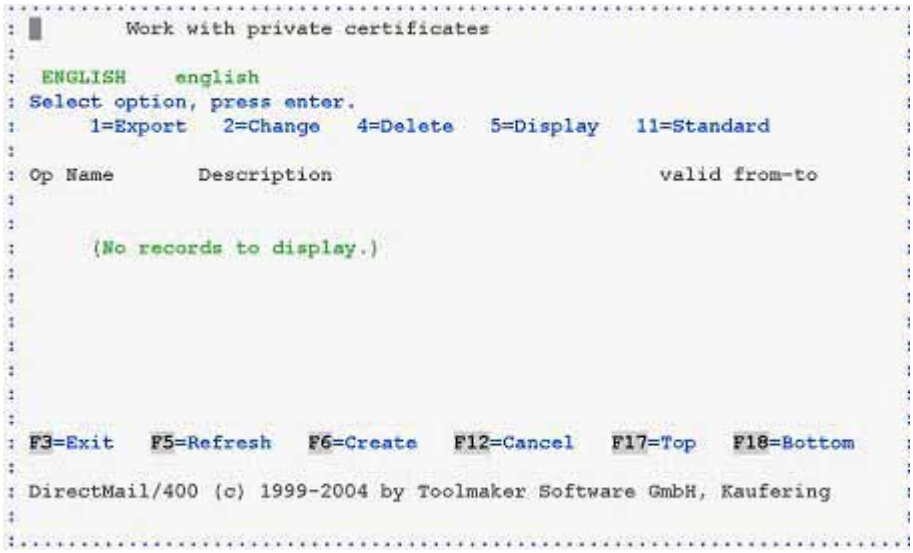
Y The signature will be attached to every forwarded/answered email.

N The signature will not be attached automatically to every forwarded/ answered email. The text can be attached to the email using F15.

5.12 Private certificates (Option 18)

With private certificates outgoing emails are signed with DirectMail. The chapter titled "Email Encryption and Digital Signatures" describes the use and export of private certificates. The import of private certificates is described here.

With DirectMail you can import private certificates you have received from trust centres.



0058 – Private certificates

Options

1=Export

Use this option to export a certificate from DirectMail.

2=Change
You can modify a certificate.

4=Delete
To remove certificates no longer used.

5=Display
Displays the contents of a certificate.

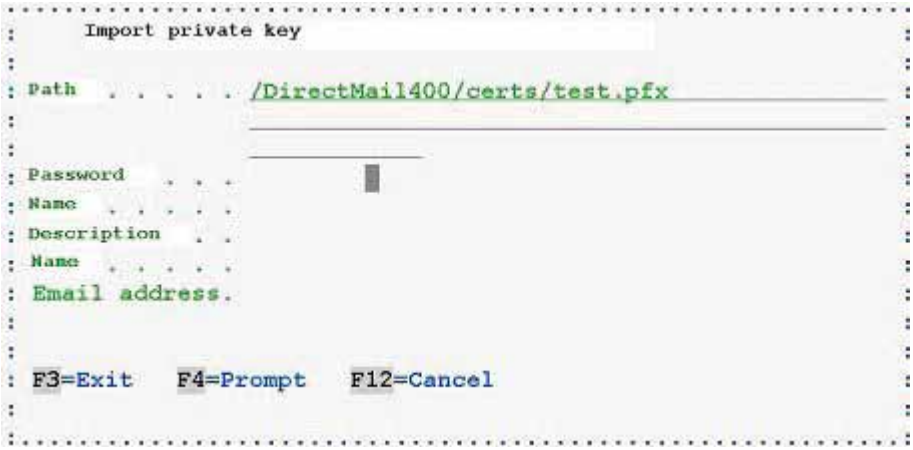
11=Standard
Use this option to define the corresponding certificate as standard certificate of the mailbox.

Function keys

F6=Create
With this import existing certificates into the DirectMail databases.

0059 – Create private certificate

Import a certificate from the IFS with option 1.



0060 – Import private key, screen 1

Path
Path where the certificate is stored.

Password

Password for the protected certificate.

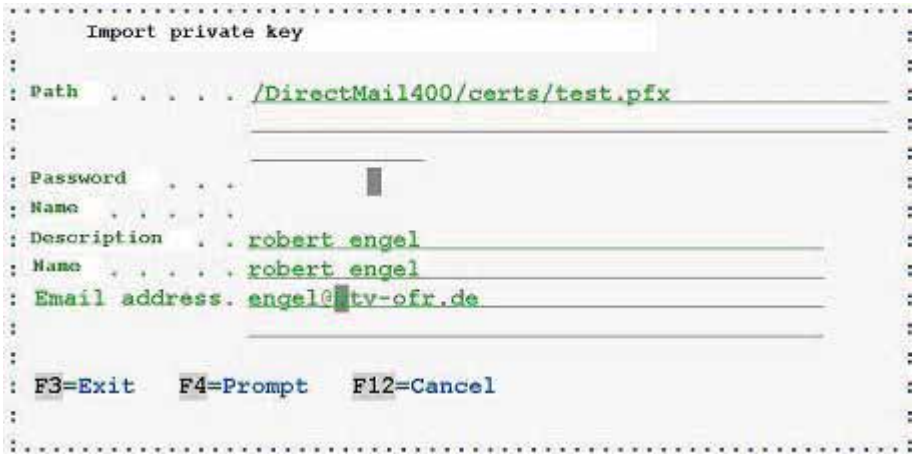
Name
Name of the certificate.

Description
Additional description.

Name
Name of the certificate holder.

Email address
Email of the certificate holder.

Select the desired certificate using F4 and enter the appropriate password. After confirming with Enter the certificate data is shown in the lower area of the screen.



0061 – Import private key, screen 2

Path
Path of the key to be imported.

Password
Password of the key to be imported.

Name
Description
Name
Email address

6.0 Email Monitor

In order to send emails from DirectMail, the exchange program, the Email Monitor, must be active.

6.1 Start E-mail Monitor (option 4)

You can start this program either interactively using menu option 4 or using the iSeries command **STRDIRMAIL (STREMLMON)**.

We recommend that you include the starting procedure of the Email Monitor into the starting program of iSeries – the QSTRUP-CL- program. Make sure that the TCP/IP program gets enough time to be started. You can achieve this by adding a delay statement following the STRTCP-command e.g.: For example:

0033.00 STRTCP

0034.00 DLYJOB DLY(60)

0034.01 DIRMAIL/STREMLMON

When no emails are to be sent, you will recognise the inactivity of the DirectMail server through a status display from within the mailbox:

0062 - Server inactive!

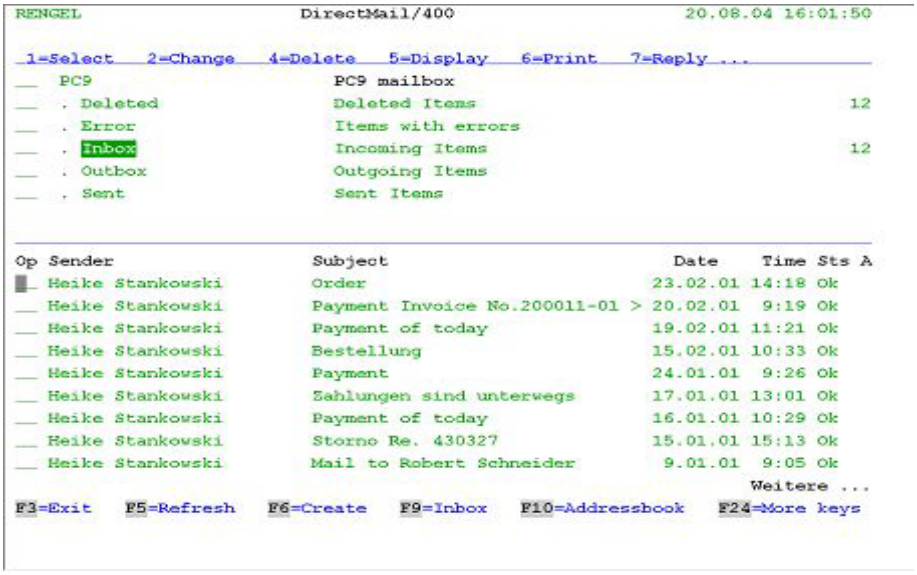
6.2 End Email Monitor (option 5)

Now and then you may not want to send any emails. This can be the case e.g., when your provider informs you about maintenance works or in cases of complete breakdown of your email server or of your provider's email server. In order not to start unnecessary connection attempts, use option **5** from the DirectMail menu or the iSeries command **ENDDIRMAIL (ENDEMLMON)** to end the Email Monitor. With this you can also specify whether the DirectMail subsystem should be shut down in a controlled mode **OPTION(*CNTRLD)** or immediately **OPTION(*IMMED)**.

7.0 Work with emails (option 7)

Having completed the necessary configuration work we get to the proper purpose of DirectMail, i.e. the work with incoming and outgoing emails.

.Although character-orientated DirectMail follows the design of popular email programs like Outlook Express, in order to guarantee a simpler training.



0063 - Work with emails

In the upper part of the screen, you see an overview of the folder/subfolders where your emails are saved.

In the lower part of the screen, you see the email from the above selected folder.

Options

1=Option (folder area)

Use this option to select the folder whose emails you want to view. See chapter **Select folder (Option 1).**

1=Option (email area)

Use this option to select an email to edit. See chapter **Select email (option 1).**

2=Change (folder area)

Use this option to change the folder name and description. See chapter **Select folder (option 2).**

2=Change (email area)

Use this option to select an email to edit. See chapter **Change email (option 2).**

4=Delete (Folder and email area)

For deleting folders/emails, depending on which part of the screen you are moving in. See chapter **Delete folder (option 4)** or chapter Delete **email (option 4)**.

5=Display (email area)
Use this option to view an email with header information, text and names of the attachments. See chapter **Display email (option 5).**

6=Print (email area)
Prints an email (text contents) on the selected printer. See chapter **Print email (option 6).**

7=Reply to email (email area)
Allows the direct reply of an email to the sender. See chapter **Replay to email (option 7)**

8=Reply to all recipients (email area)
Allows the reply of an email to all recipients of the original email. See chapter **Reply to all recipients (option 8)**.

9=Forward email (email area)
Forwards a received email to other recipients. See chapter **Forward email (option 9).**

10=Attachment (email area)
Working with attachments (import, export, view, etc.). See chapter "Attachments"**.**

11=Re-send (email area)
With this you can send an already sent email again.

12=Search (folder area)
Scans for emails within a mailbox according to the entered search criteria. See chapter **Transmit emails (option 12).**

13=Incoming mail assistant (email area)
Transmits incoming emails again to the Incoming Mail Assistant for processing.

16=Release (email area)
Release emails that have been stopped for transmission.

17=Move (email area)
Moves an email into another folder. See chapter **Move emails (option 17).**

19=New folder (folder area)
Creates a new folder for the better structuring of incoming and outgoing emails. See chapter **New folder (Option 19).**

25=Internet (email area)
When an email is received with the POP server then, it is filed in MIME format. This option allows the MIME key words to be displayed. This can e.g. provide information over which mail server the email has been transmitted, etc. Most mail programs have a function that can be selected via File/Properties. Also with outgoing emails, the return messages from the SMTP server are contained here.

99=Synchronize (Folder area)

Use this option to re-synchronize the counter for the new/read emails.

Function keys

F9=Incoming mail
Use this function to view all emails in the incoming mail folder, regardless of which folder you were in previously.

F10=Address book
Displays the address book for the administration of addresses. See chapter **Address book (Option 12)**.

F13=Repeat
Repeats the last option selected.

F14=Absence
Allows the entry of times of absence for the automatic reply to incoming emails together with the Incoming Mail Assistant . See chapter Absence (Option 14).

15=Auto sign
Edit text for an AutoSignature.

F16=Password
Allows you to enter a password for the mailbox.

F17=Top
Position at top.

F18=Bottom
Position at bottom.

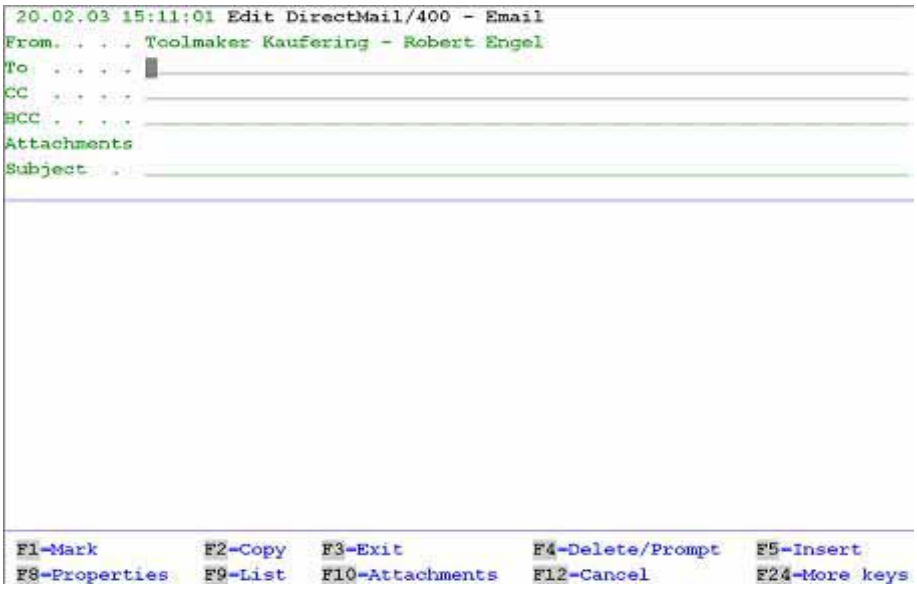
F19=Accounts
Goes to the assigned email accounts. The password can be changed here. See chapter Email Accounts **(Option 10).**

F20=Incoming Mail Assistant
Calls the Incoming Mail Assistant.

F22=Transmit
Collects emails with the provider and sends emails to be transmitted. See chapter Transmit emails (option 10).

7.1 Create new email (F6)

You can create a new email using `Function key 6`.



0064 - Create new email

To
One or more recipients having those email addresses that should receive this message. Instead of @ character, DirectMail also supports the § character.

CC
The recipients having those email addresses that should receive this message as a copy.

BCC
The recipients having those email addresses that should receive this message as a blind copy, i.e. none of the other recipients knows that this message has also been sent to one of the recipients under BCC.

Attachments
The files attached to this email will be named here. Look at chapter Attachments to receive more information about attachments.

Subject
Here you can enter the subject of the email.

Text
In the blank area under the separating line you can enter any text that should be sent to the recipient.

Note
If at the end of an email line a '+' is added, the following line will be added to this line when transmitting. This is helpful when e.g. long URLs should be shown that cannot be separated.

Function keys

F1=Select
Highlight the lines by pressing **F1** in the first line and pressing **F1** again in the last highlighted line.

F2=Copy
Copy the text highlighted with F1 to the line following the cursor position using **F2**.

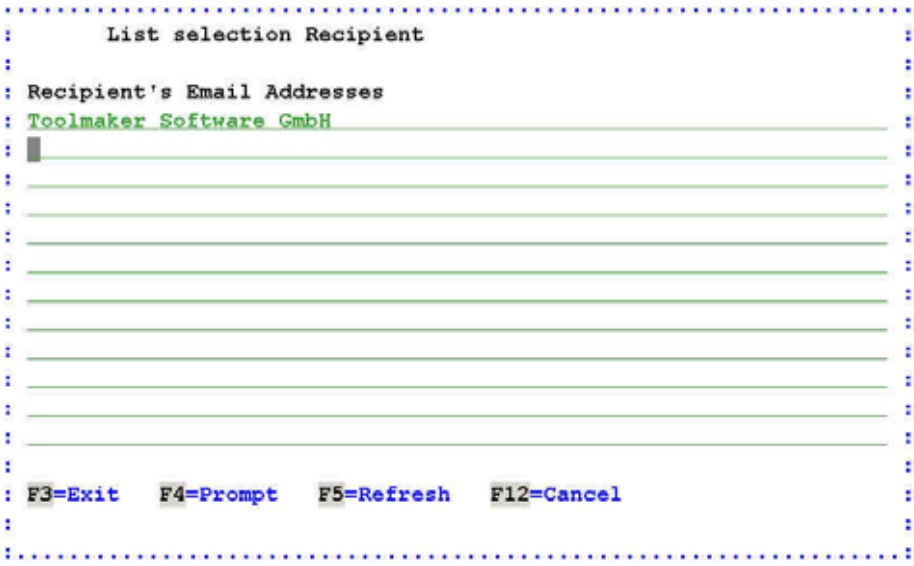
F4=Delete/Prompt
In the text body, **F4** will delete that line where the cursor has just been positioned.

In the header, **F4** will display the address book for selecting recipients. When you have several address books, you can look, after pressing **F4**, press **F10** to search for recipients over all address books.

F5=Insert
An empty line will be inserted underneath the cursor position.

F8=Properties
In the header, the properties of a recipient will be displayed, when you position the cursor on the recipient name and press **F8**. **Note:** Here you can also add email addresses to the address book using **Function key 6**.

F9=List
Displays a list of all recipients; recipients can be added using F4.



0065 - Display list

F10=Attachments
Jumps to the display "Work with Attachments". The function "Attachments" is explained more precisely further below in this Guide.

F14=Move
Moves a highlighted text behind the line following the cursor position.

F15=Insert from
Not yet active.

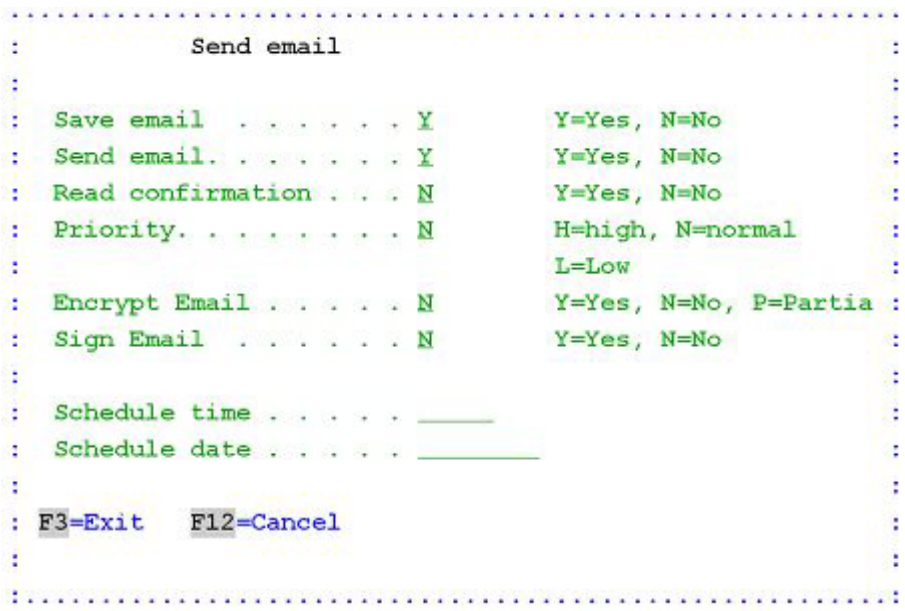
F17=Top
Position at top.

F18=Bottom

Position at bottom.

7.1.1 Exit email and send (F3)

When you have completely entered the recipient(s), subject, text and attachments, you can send the email using F3.



0066 - Send email

Save email

Use this option to save the email and reserve it for sending.

The values allowed are:

Y The email will be saved

N The email will be rejected

Send email

Use this option to start the procedure of sending the email.

The values allowed are:

Y Send email

N Do not send email yet

Read confirmation

If a recipient receives an email with read confirmation and his email program supports this function, he will be asked whether a receipt confirmation should be sent back to the sender. When the recipient confirms this question with Yes, the sender will receive confirmation that the recipient has received and read the message.

The values allowed are:

Y Request read confirmation

N Do not request read confirmation

Priority

The priority with which the email should be delivered is set here.

The values allowed are:

H The email is sent with high priority

N The email is sent with normal priority

L The email is sent with low priority.

Encrypt email

The default setting for whether e-mail sent by DirectMail is encrypted. This can be changed for each e-mail. To send encrypted mail, you need the DirectMail Encryption module and the license DM400CRY.

The values allowed for this parameter are:

N Email will not be encrypted

Y Email will be encrypted

M Encryption allowed, the email will be encrypted if a certificate exists.

If an email is sent encrypted, a possible MIME copy of this mail will always be filed unencrypted in the IFS. This is necessary for displaying the email for archiving or other purposes.

Sign Email

DirectMail also supports digital signing of e-mail in order to ensure authenticity. Certificates are required for signing.

The values allowed for this parameter are:

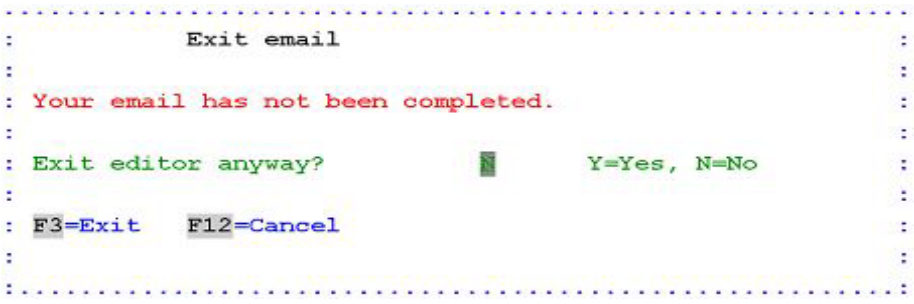
N Email will not be signed

Y Email will be signed digitally

Schedule time
Schedule date

If you want to send an email at a specific date/time, enter it here. Otherwise the email will be sent as soon as possible

Provided that you have not yet completed all necessary entries and try to exit the email using F3, an error message will appear.

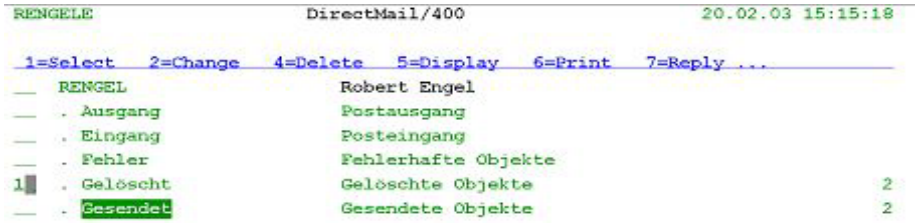


0067 - Error message: Exit email

You can exit and reject the email using Option **J**, or go back to the editor using **N** or **F12**.

7.2 Select folder (option 1)

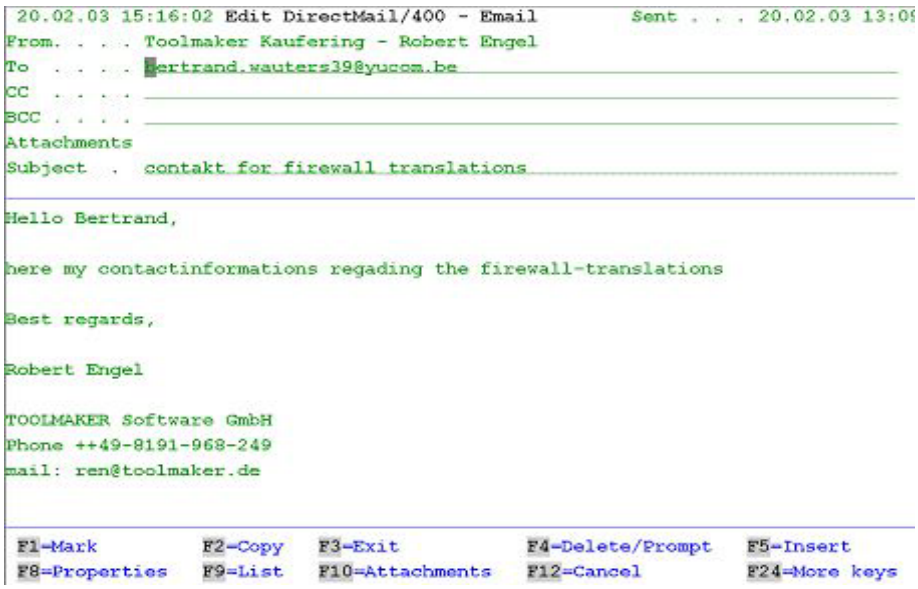
Use this option to select emails for display from a specific folder or subfolder.



0068 - Select folder

7.3 Select email (option 1)

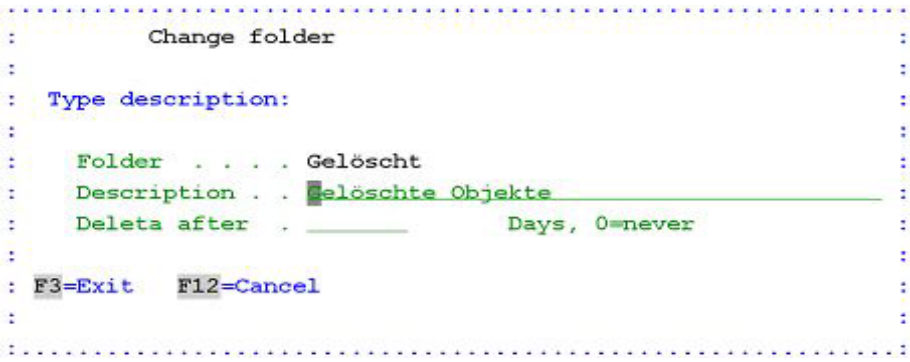
Use this option to select emails for editing from a specific folder or subfolder.



0069 - Select email

7.4 Change folder (option 2)

Use this option to change a folder name or its description.



0070 - Change folder

Folder
When you want to rename a folder, type in the new name here.

Description
The text description of the folder, which is shown in the display "Work with emails".

Delete after
Here you specify whether the existing emails in this folder should be taken into account in the automatic reorganisation.

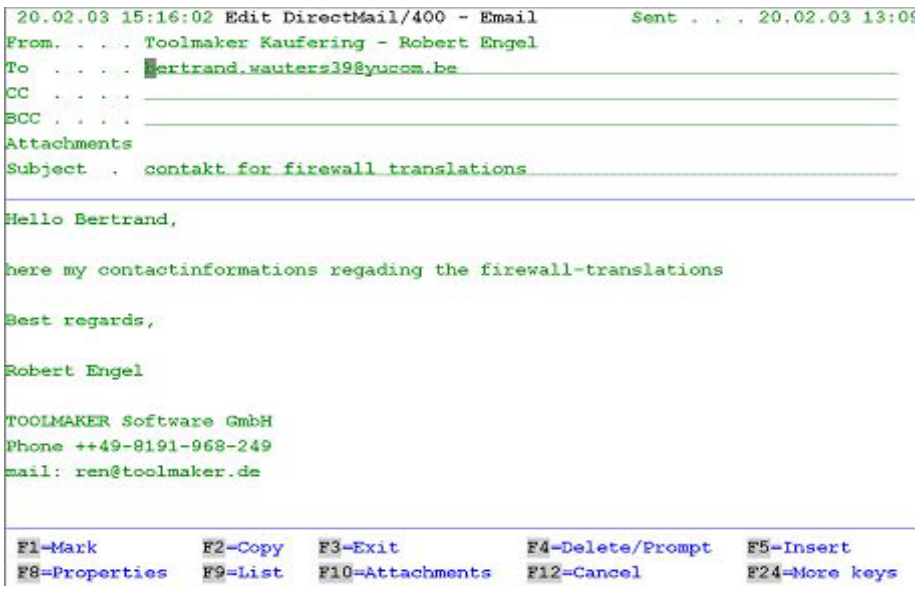
The values allowed are:

Days A number of days after which the emails should be deleted.

0 The emails should never be deleted automatically.

7.5 Change email (option 2)

Use this option to select emails for editing from a specific folder or subfolder.

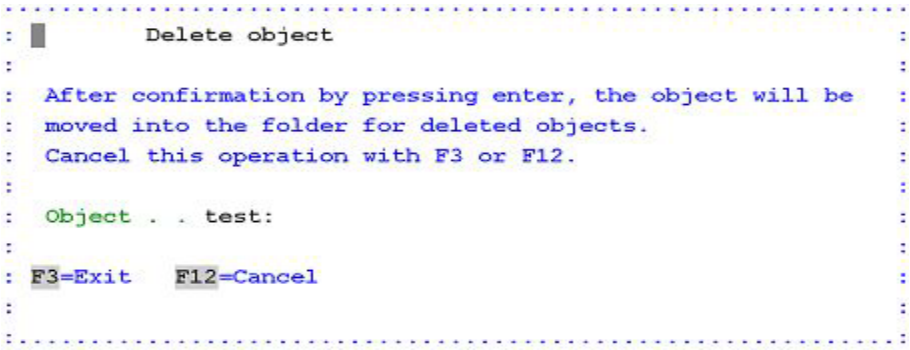


0071 - Change email

7.6 Delete folder (option 4)

Use this option to delete folders/subfolders no longer needed.

Note: Please note that the emails in the folder will be deleted as well.

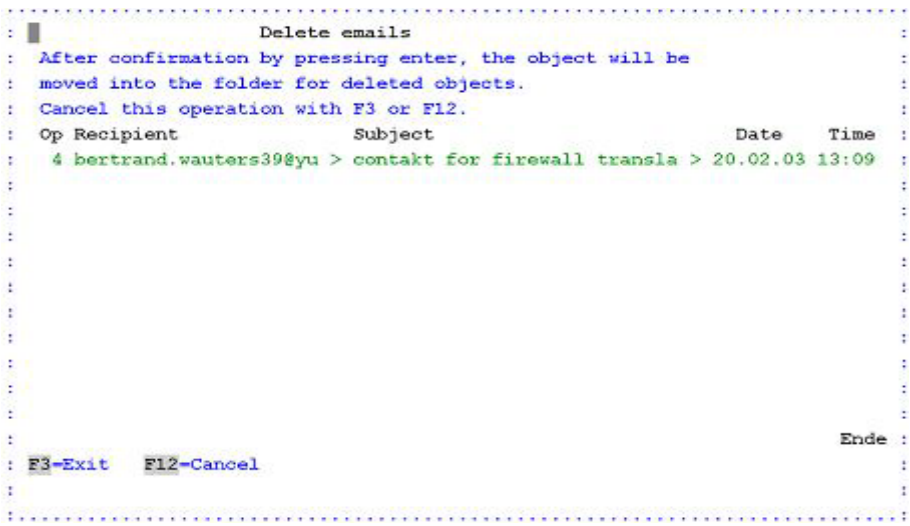


0072 - Delete folder

Confirm your option using the **Enter key** or return to the previous screen using **F12**.

7.7 Delete email (option 4)

Use this option to delete emails no longer needed.



0073 - Delete email

Confirm your option using the **Enter key** or return to the previous screen using **F12**.

7.8 Display email (option 5)

You can see the text components of an email using this option. The email header, the text and name of the attachments will be displayed.

0074 - Display email

Next to the display of emails you can turn in and out subfolders in the folder area using Option **5**.

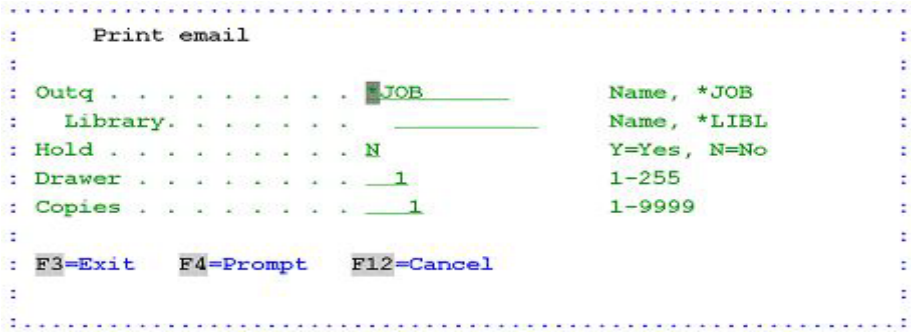
0075 - Folder hidden below Outgoing Mails

0076 - Folder shown below Outgoing Mails

Provided that you have installed the DirectMedia product from Toolmaker and activated the configuration from DirectMail, with Option 1 the emails will be shown for you on the PC not in the 5250 emulation, but Outlook-Express opens itself with the incoming mail on the PC. With this, of course, all attachments remain editable in an easy way.

7.9 Print email (option 6)

Use this option to print an email (text components) on a selected printer.



0077 - Print email

Outqueue
Enter the printer's outqueue, where the email shall be printed.

Library
The outqueue's library.

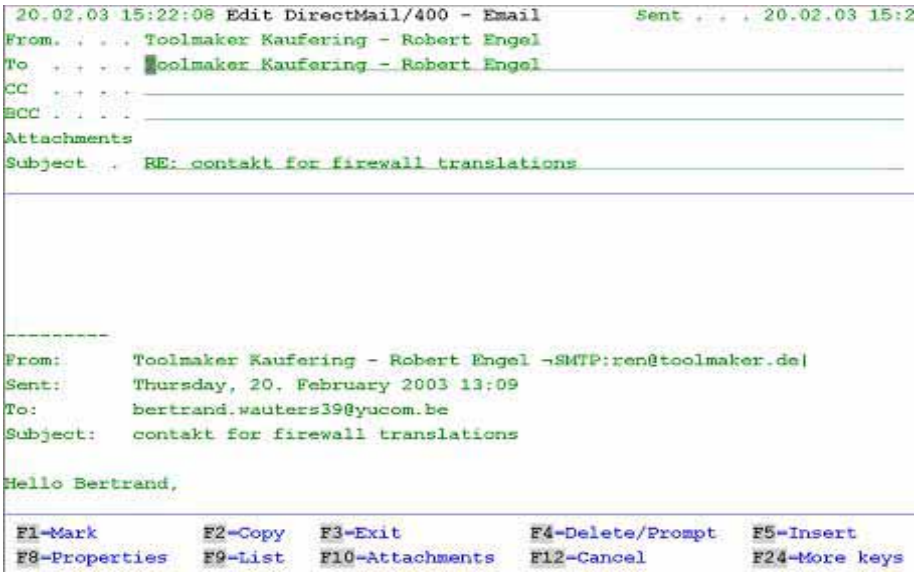
Hold
Sets the job status in the outqueue to „Hold". The job isn't printed immediately.

Paper tray
Indicates the paper tray.

Copies
Numbers of copies to be printed.

7.10 Reply to email (option 7)

Incoming emails can be answered using Option **7**, i.e. an email will be shown, in which the sender of the original message has already been inserted as the recipient of the reply and the original text of the received email remains as a comment.

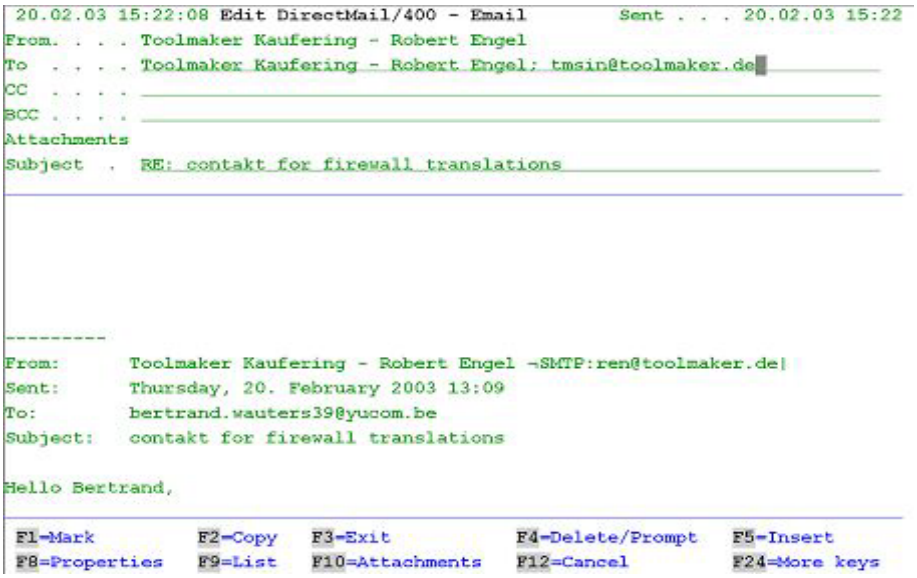


0078 - Reply to sender

After entering your reply text, you can exit the email using **F3**

7.11 Reply to all recipients (option 8)

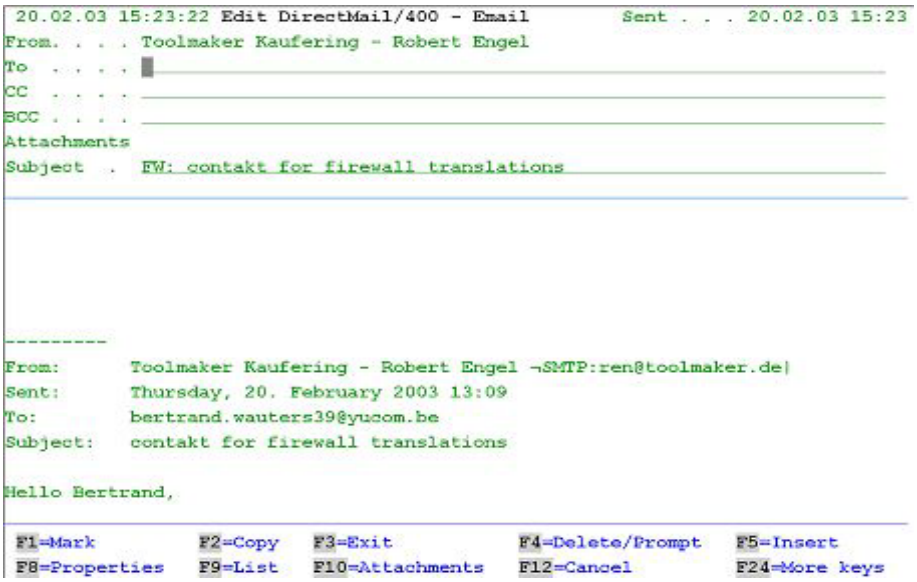
When you have received an email, which other recipients have received as well, you can reply to all participants using this option. As with "Reply" the recipients and the comment text are already inserted.



0079 - Reply to all participants

7.12 Forward email (option 9)

This function allows you to forward a received email to another recipient; in this case the original email will be attached.



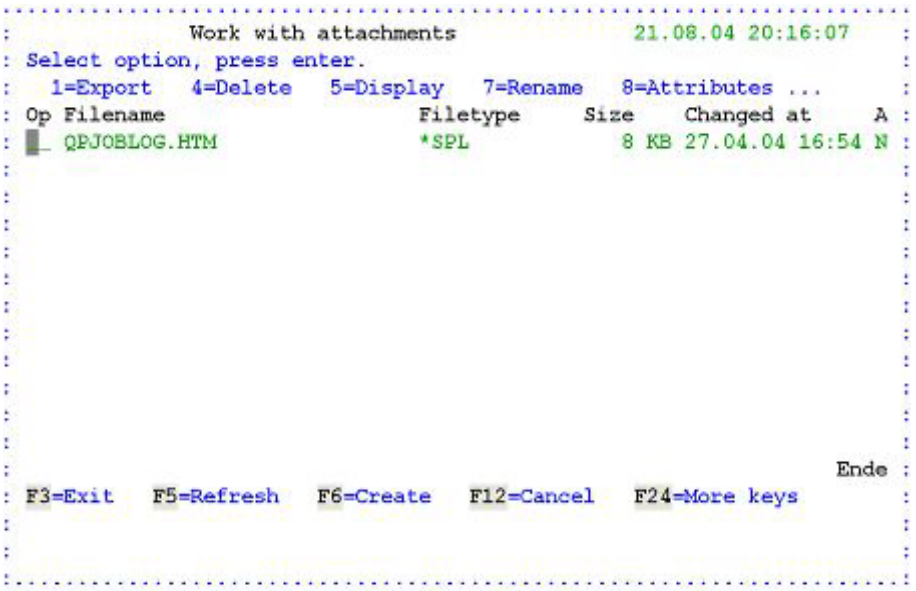
0080 - Forward email

Here you can also enter text, which the recipient receives together with the forwarded email.

7.13 Attachments to emails (option 10)

Attachments to emails are widespread and current possibilities of attaching PC documents to an email. DirectMail goes a step further here:

In addition to PC files (including emails in .eml format) you can also attach iSeries spoolfiles and iSeries objects such as libraries or programs to emails.

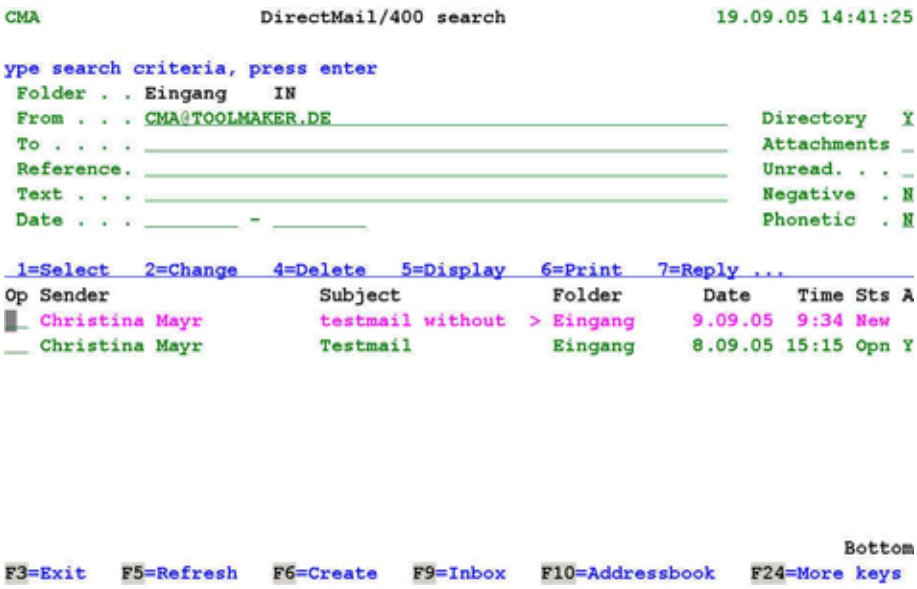


0081 - Attachments

The attachments function is commented on more precisely below in this Guide.

7.14 Search emails (option 12)

DirectMail involves a search function, which selects and displays all matching emails within a folder on the basis of the email header and texts.



0082 - Search in folders

Enter the desired search strings in the displayed fields and press the Enter key. The emails displayed match the search criteria.

You can use the "?" character as a wildcard. This can be particularly useful for deleting spam.

Note: The search is a generic search, i.e. the entered search string can appear somewhere in the field.

From
Search for senders name/address

Subfolder
Search in subfolders or in the displayed folder only

To
Search for recipients name/address

Attachments
Search for mails with attachments only

Subject
Search for character string in subject

Unread
Search for unread mails only

Text
Search for character string in the text

Negative

If you enter "N" in the "Negative" field, all emails not matching the search will be displayed.

Date
Restricts the search in a date area

Phonetic
You can enter "Y" in the "Phonetic" field to carry out a phonetic search for recipient, sender subject and text within a mailbox.

7.15 Transmit emails to the Incoming Mail Assistant (option 13)

When an incoming email has been processed by the Incoming Mail Assistant and e.g. an Exit Program has been ended with a negative result, because the email address of the sender has not been found in the address file, you can now, after the email address has been recorded in the master data, transmit the email manually again to the Incoming Mail Assistant for a new processing.

7.16 Release emails (option 16)

Release emails that have been stopped for transmission.

7.17 Move emails (option 17)

With this option, you can move emails from one folder to another and improve the clear structure without having to unnecessarily delete emails.

```
                Select folder                          21.08.04 20:17:56
Select option, press enter.
  1=Select   5=Display
O  Folder                Description
_  Deleted               Deleted Items
1  Error                 Items with errors
_  Inbox                 Incoming Items
_  Outbox                Outgoing Items
_  Sent                  Sent Items
                                                                    Ende
F3=Exit    F5=Refresh    F12=Cancel    F17=Top    F18=Bottom
```

0083 – Move emails

Options

1=Select

The email will be moved into the selected folder.

5=Display
Use this option to turn in subfolders for a folder displayed with “+“ in front.

7.18 New folder (option 19)

Use this option to create a new folder of the top level or a new subfolder in an existing folder/subfolder

The new folder will always be created below the folder in front of which you use Option **19**.

0084 - Create folder

New folder
Enter a name for the folder you want to create.

Description
A text description of the folder.

7.19 Internet (option 25)

Use this option to display SMTP server error messages for mail that has not been sent correctly.

Also displays the definitions used if the email has been processed by the Incoming Mail Assistant.

7.20 Repeat send (option 98)

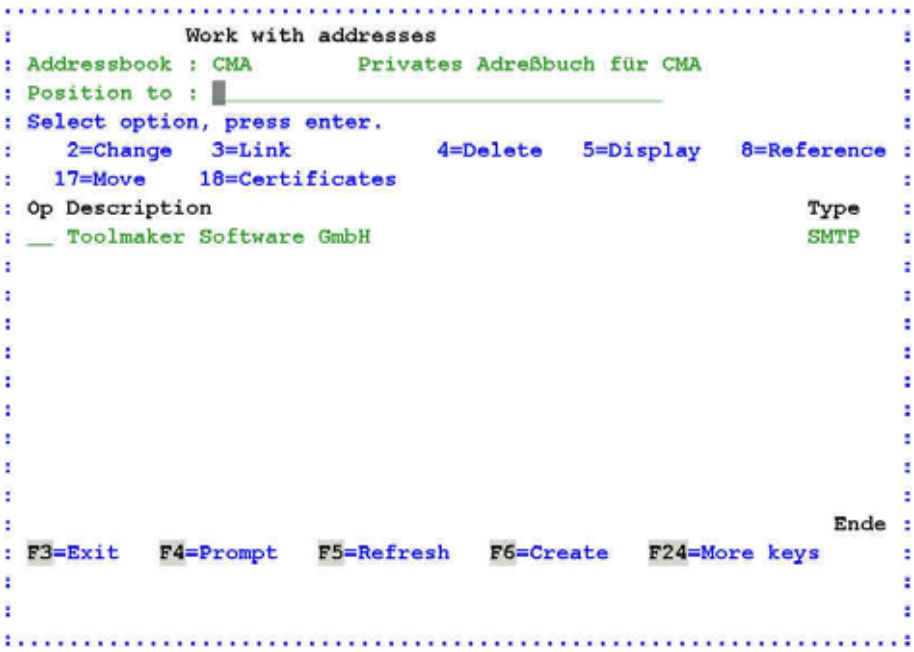
This hidden function enables e.g. in case of mass mailings, the repetition of emails marked as faulty due to Time-Outs. All email with the status “ERR” is moved back to the outbox to be resent.

7.21 Incoming mail from mailbox (F9)

From within the mailbox you can go to the incoming mails directly with **Function key 9,** i.e. whatever folder you are currently in, the content of the “Incoming Mails” folder will be displayed.

7.22 Address book from mailbox (F10)

You can use **Function key 10** to display the address book from within the mailbox. All functions described in the chapter **Address book (option 12)**Fehler! Es wurde kein Textmarkenname vergeben. are available.



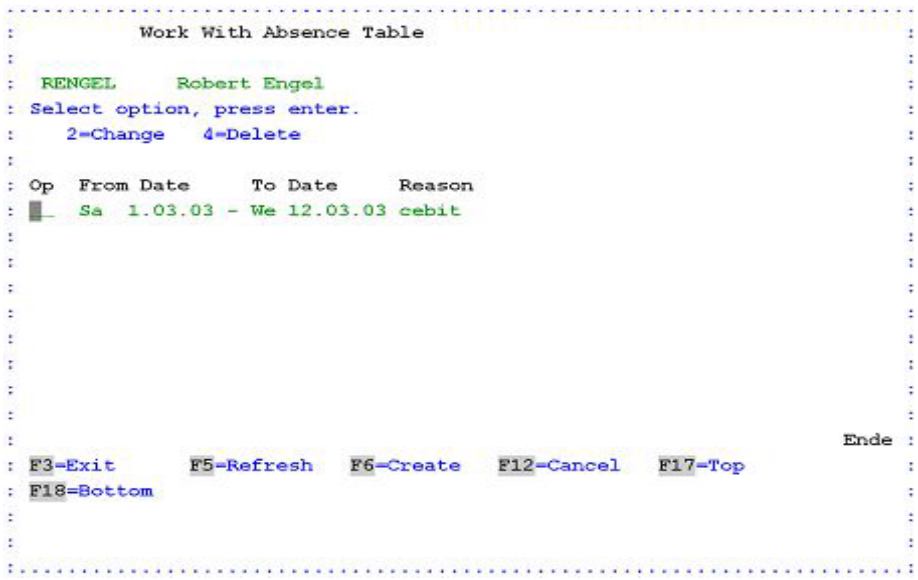
0085 - Address book

7.23 Repeat call (F13)

Analogously to the function in PDM, you can repeat a select made up to the last entry using **Function key 13**. You can e.g. highlight the 50th entry of 200 entries in a folder with entering **4**, then press **F13** and delete all entries from 50 to the last entry with **Enter key** .

7.24 Asence from mailbox (F14)

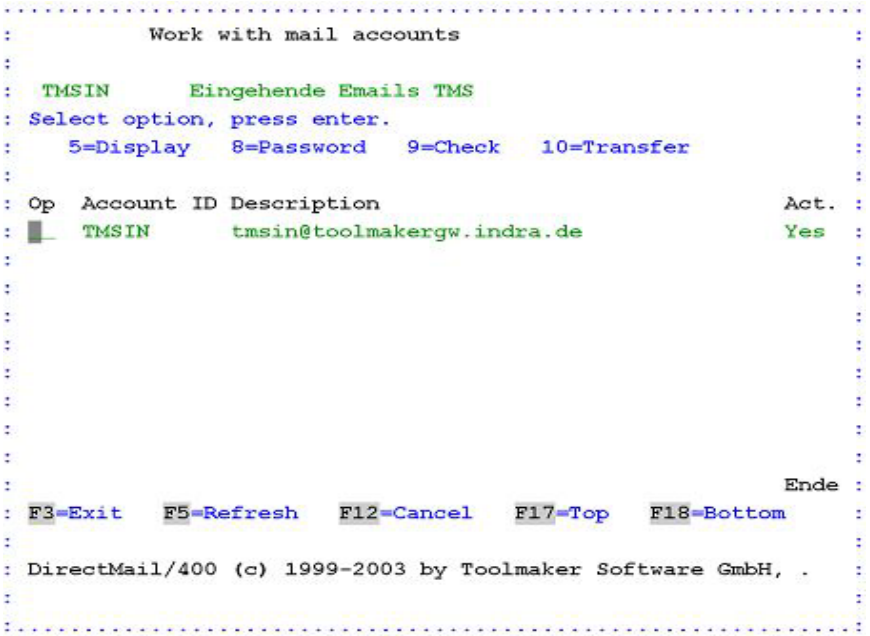
Using **Function key 14** you can go to the screen for entering times of absence that have already been more precisely described in the chapter **Absence (Option 14)Fehler! Es wurde kein Textmarkenname vergeben.**.



0086 - Absences

7.25 Email accounts from mailbox (F19)

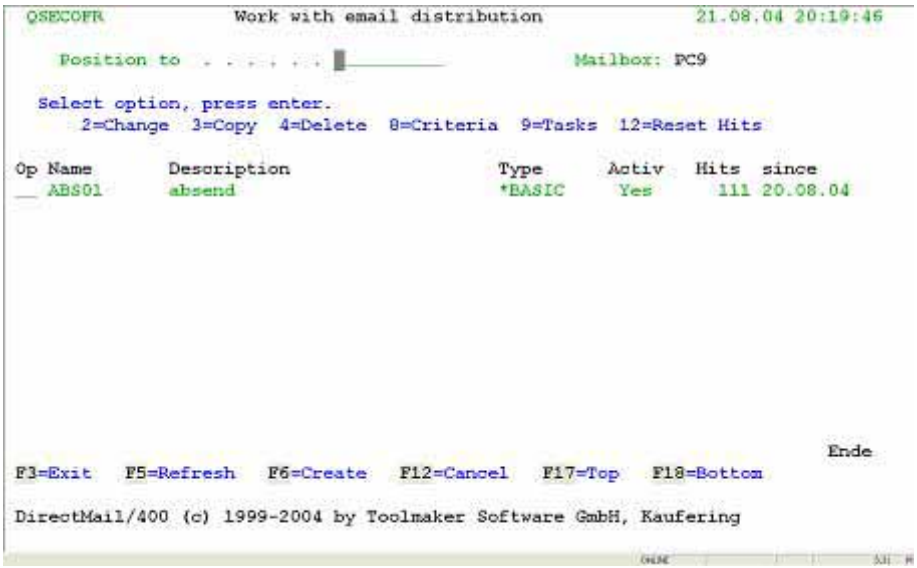
Using **Function key 19**, you can go to the screen for administrating the mail accounts and carry out some functions (in particularly change of password), which have already been more precisely described in the chapter **email accounts (Option 10)** previously in this manualFehler! Es wurde kein Textmarkenname vergeben..



0087 - Email accounts

7.26 Incoming Mail Assistant from mailbox (F20)

Using **Function key 20**, you can go to the Incoming Mail Assistant and can carry out all the functions, which are more precisely described below in the chapter “Incoming Mail Assistant”.



0088 - Incoming Mail Assistant

7.27 Transmitting from mailbox (F22)

Using **Function key 22**, you can start the transmission (sending and receiving) of emails from within the mailbox.

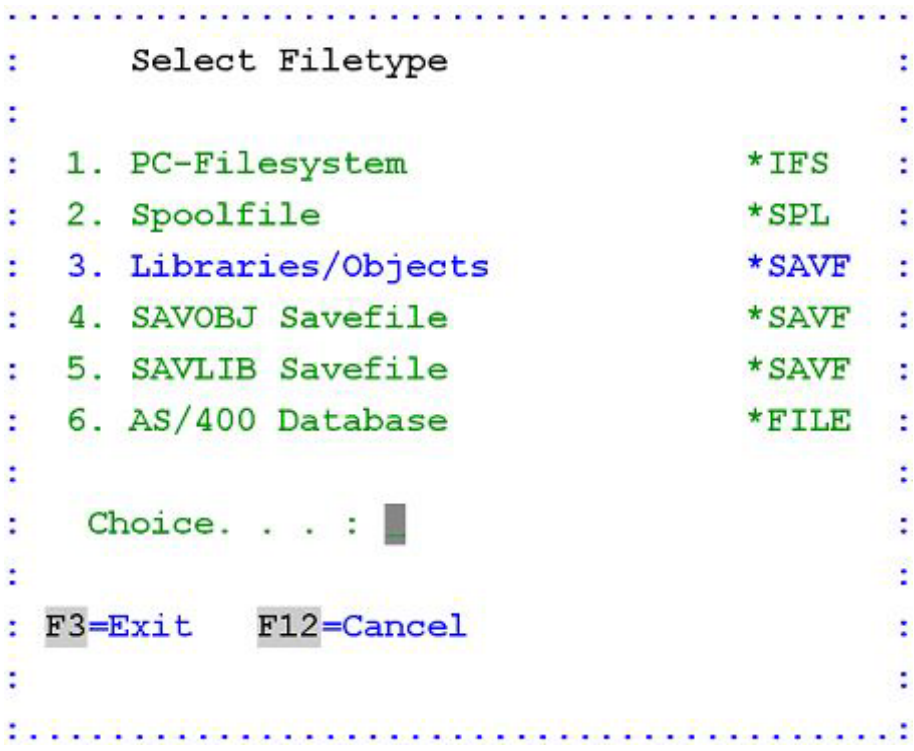
8.0 Attachments

Although DirectMail is a host-based email system, you still have the comfort that you know from popular PC applications. In addition to the sending of texts, email attachments are also a widely used and common way of attaching any PC documents to an email.

DirectMail supports you with the Attachment function with which you can send any PC documents such as Word documents, Excel spreadsheets, EXE files to name but a few. As well as PC files, you can also use your DirectMail to attach iSeries spoolfiles in different formats or iSeries objects such as programs, files, folders or complete libraries.

The Attachment function can be called from within screen for creating an email using **Function key 10**, or from within the Mailbox by selecting Option **10** in front of an email.

Using **F10** from within an email you will get, depending on whether you have already entered attachments, the overview of the attachments or otherwise immediately the following display.



0089 - Select attachment file type

Options

1=PC documents

Use this option to attach PC documents from the IFS. See chapter **Attach PC documents (option 1).**

2=Spool file

Use this option to attach iSeries spoolfiles to an email. See chapter **Attach spoolfiles (Option 2).**

3=Libraries/Objects
Currently inactive.

4=SAVOBJ savefile
Use this option to attach iSeries objects. See chapter **Attach iSeries objects (option 4).**

5= SAVLIB savefile
Use this option to attach an iSeries library. See chapter **Attach iSeries libraries (option 5).**

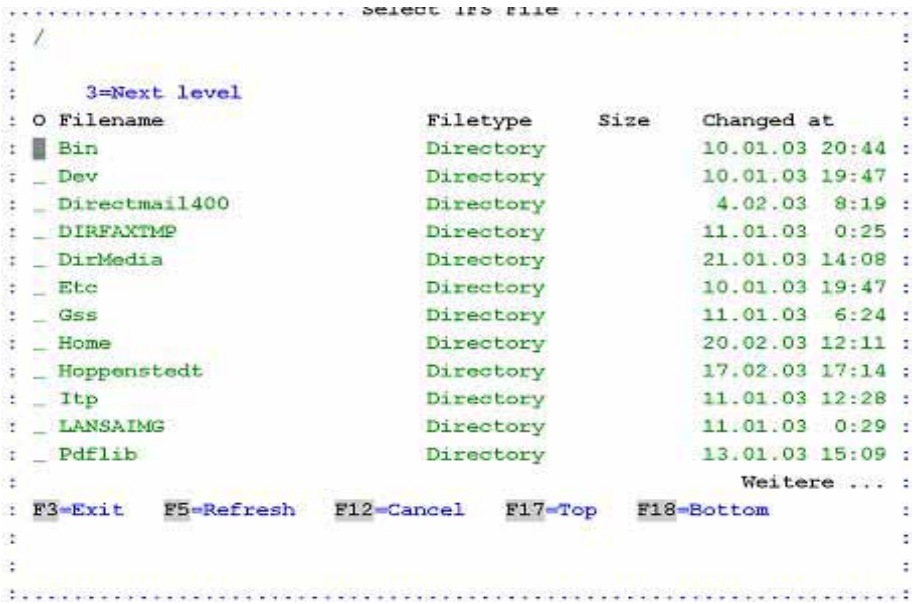
6=AS/400 database
Use this option to attach an iSeries database. See chapter **Attach iSeries libraries (option 5).**

8.1 Attach PC documents (option 1)

PC documents come from different sources. Either you have PCs yourself in your company with which you create documents, which are to be sent later with DirectMail or you receive PC files as an attachment of received emails that should be forwarded.

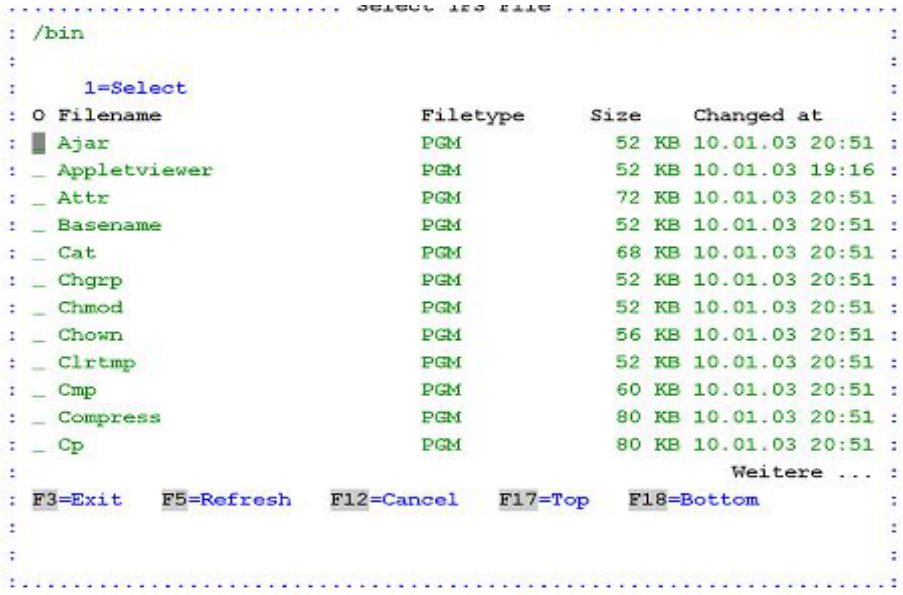
All sources have one thing in common: the storage space of PC documents, which should be processed with DirectMail. All PC documents will be saved temporarily in the Integrated File System of iSeries (IFS). In addition to the accessibility by DirectMail, this has another advantage: if you include the IFS in your daily backup, all PC documents from this area will be stored in your daily data backup.

You can attach PC documents with Option **1** from the display "Select file type".



0090 - Select IFS file

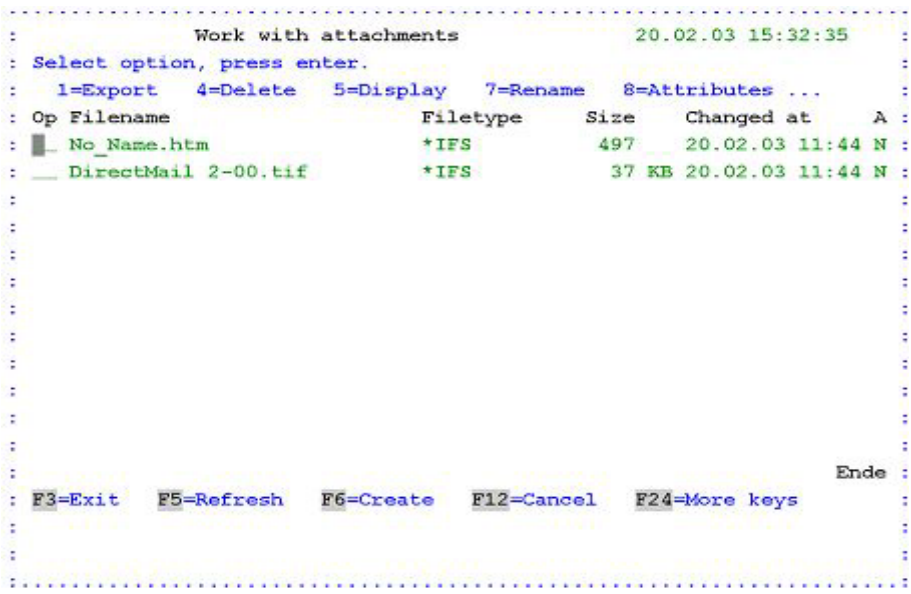
Here you can jump to the desired directory using Option **3**.



0091 - Select file

Using Option **1** you adopt one or more files at the same time as an email attachment.

After the selection of PC files, the overview of the attachments will be displayed:



0092 - Overview of attachments

Options

1=Export

Use this option to remove attachments from the email and convert them into the corresponding original format. See chapter “Attach iSeries Database”.

Contains an email another email in MIME format as attachment you can display this attached email and export it to the Incoming Mails.

0093 – Work with attachments

Select export type

Before exporting an attachment, you must select an export type.

0303 – Select export type

Options

1	PC file system *IFS
2	Spool file *SPL
3	Savefile *SAVF
4	Certificate *CERT
5	Email (Inbox) *EML

Selection

Enter the export type.

4=Delete

Deletes an email attachment. See chapter **Delete attachments** (**Option 4**)

5=Display

Displays the text of an attachment. See chapter **Display attachments** (**Option 5**)

7=Rename

Use this option to rename the attachment. See chapter **Rename attachment (option 7)**Fehler! Es wurde kein Textmarkenname vergeben.**.**

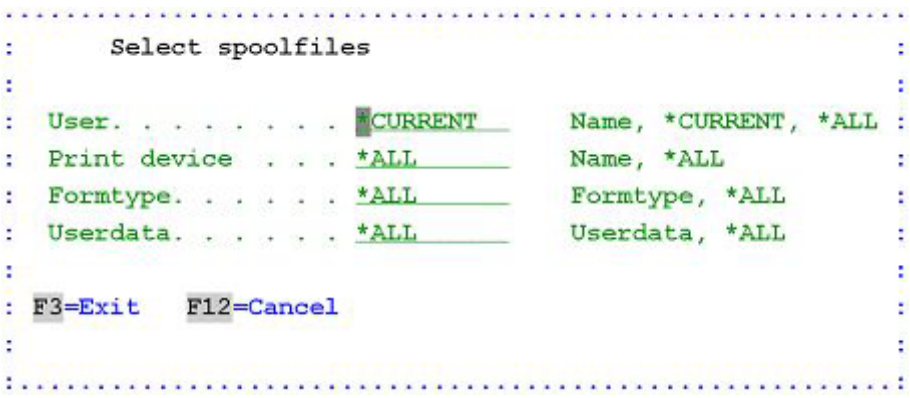
8=Attributes
Displays the attachment's attributes. See chapter **Attachments attributes** (**option 8**)

9=Compress
You can compress an attached file. See chapter **8.11 Compress attachments**.

10=Decompress
You can decompress compressed attachments. See chapter **8.11.1.1 Decompress attachments**.

8.2 Attach spoolfiles (option 2)

Often, iSeries printouts must be forwarded to software houses, field service team members or customers/suppliers. Quite often these spoolfiles will be printed out and sent by fax. You can also send this data directly by email.



0094 – Select spoolfiles

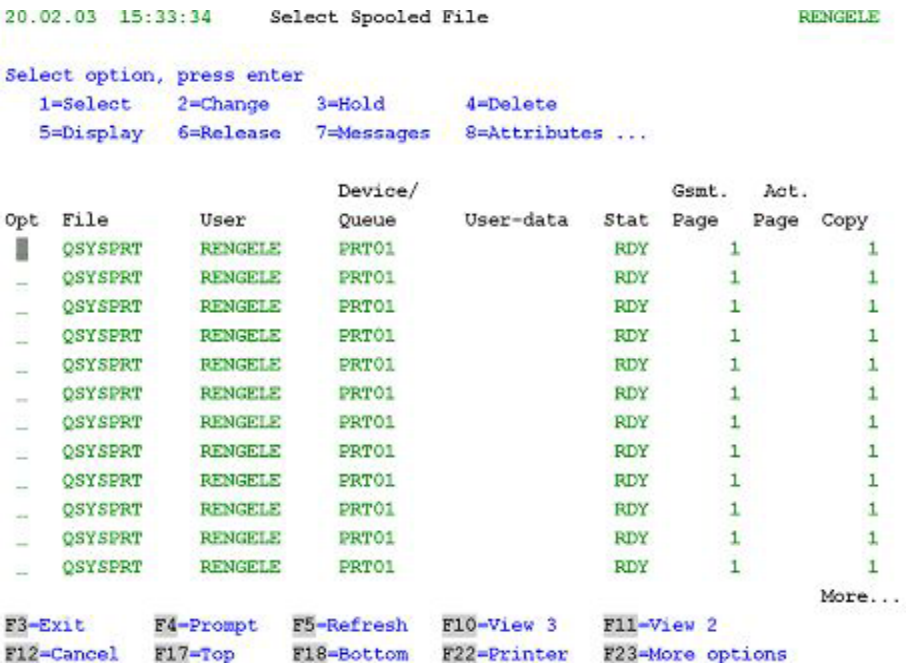
User
User creating the spoolfile.

Print device
Print device where the spool shall be printed.

Form type
Form type of the spoolfile.

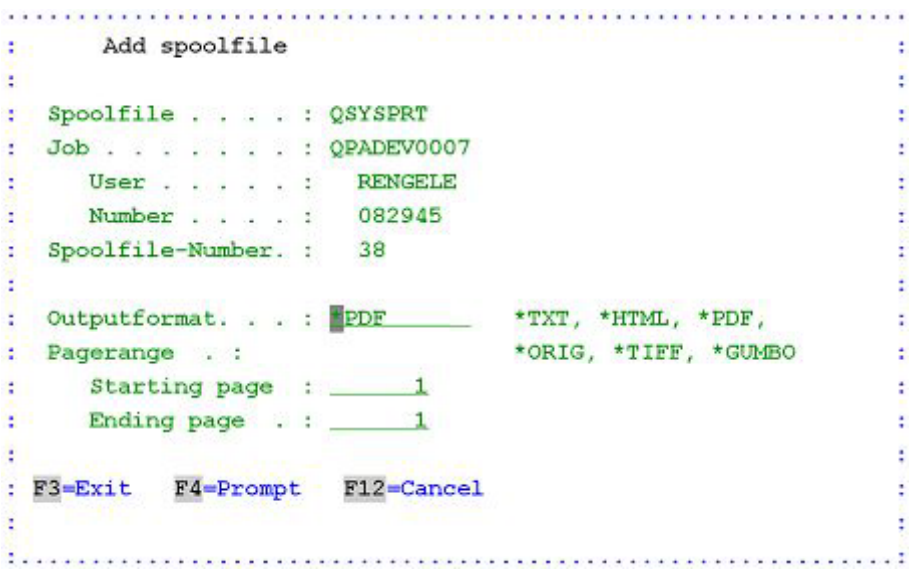
User data
User data of the spoolfile.

Delimit the range of spool data you want to display for selection.



0095 - Display spoolfiles

Use **1** to select the spoolfile(s) that are to be attached and specify the sending option.



0096 – Spool file format

Output format

Specify in which format the spoolfile should be attached to the email

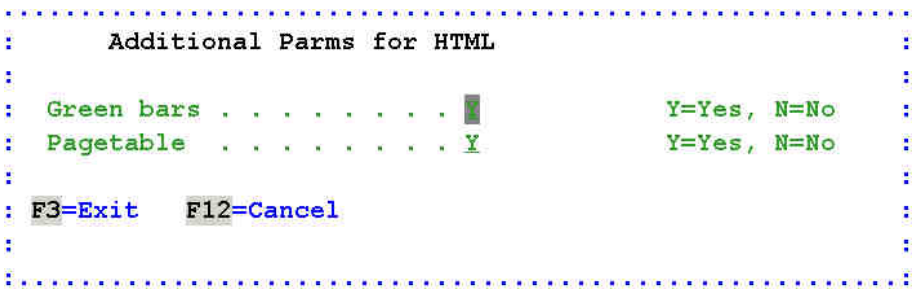
The values allowed are:

*CSV The spoolfile is converted to semicolon-delimited text and attached.

***TXT** The spoolfile is converted to ASCII text and attached.

***HTML** The spoolfile is converted into an HTML document and attached.

Additional parameters for HTML:



0304 – Additional parameters for HTML files:

***PDF** The spoolfile is converted to PDF format (read with Acrobat Reader) and attached.

***EPDF** Adobe's PDF file format, but in the Enhanced Version of DirectView PDF. This format supports elements such as form overlays, allowing you to use background JPG or TIF files with the spool to create complete printed forms.

***ORIG** The email recipient works with DirectMail and can view the spoolfile in iSeries format.

***GUMBO** The spoolfile is converted by Gumbo SPLAMATIC and attached.

***TIFF** The spoolfile is converted to a TIFF graphic and attached.

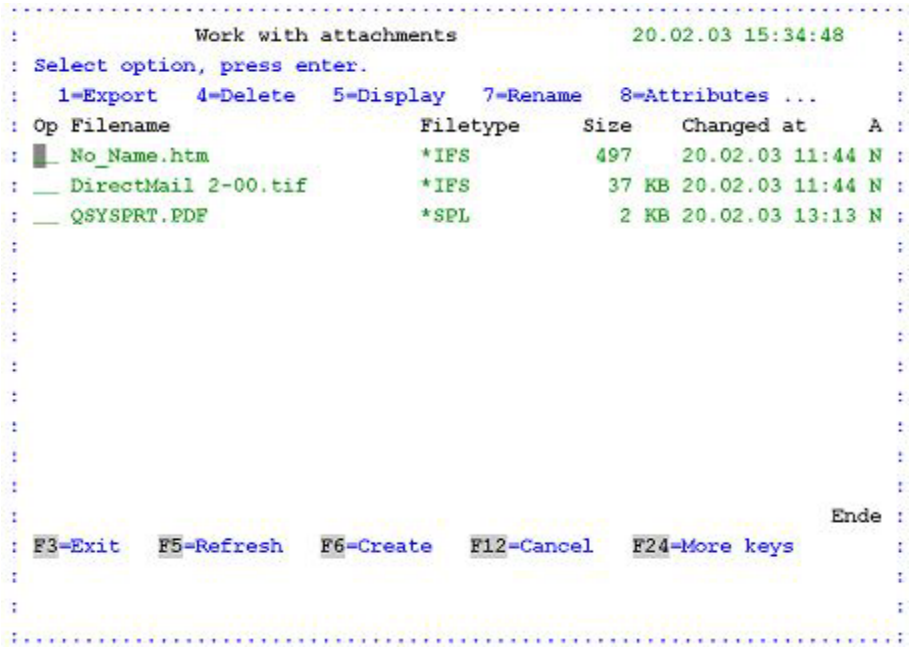
***RAW** Copies the pure data stream to a PC file (used for PCL and AFP).

***HPT** The spoolfile is converted into an HPT document and attached.

Start page
Start page from where the spoolfile shall be attached.

End page
End page until the spoolfile shall be attached.

After selecting the spoolfiles, an overview of the attachments will be displayed:

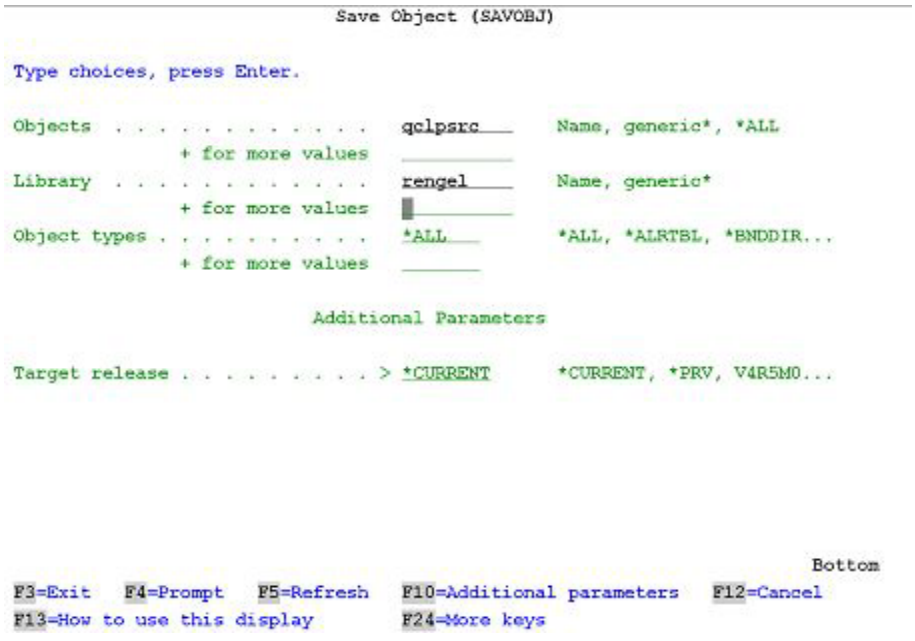


0097 - Overview of attachments

8.3 Attach iSeries objects (option 4)

DirectMail is different from PC mail systems in that it can send native objects from the iSeries as email attachments.

When the recipients of your email use an iSeries with DirectMail, they can comfortably receive iSeries objects from you and restore them to the iSeries.



0098 - Backup and attach iSeries objects

Objects

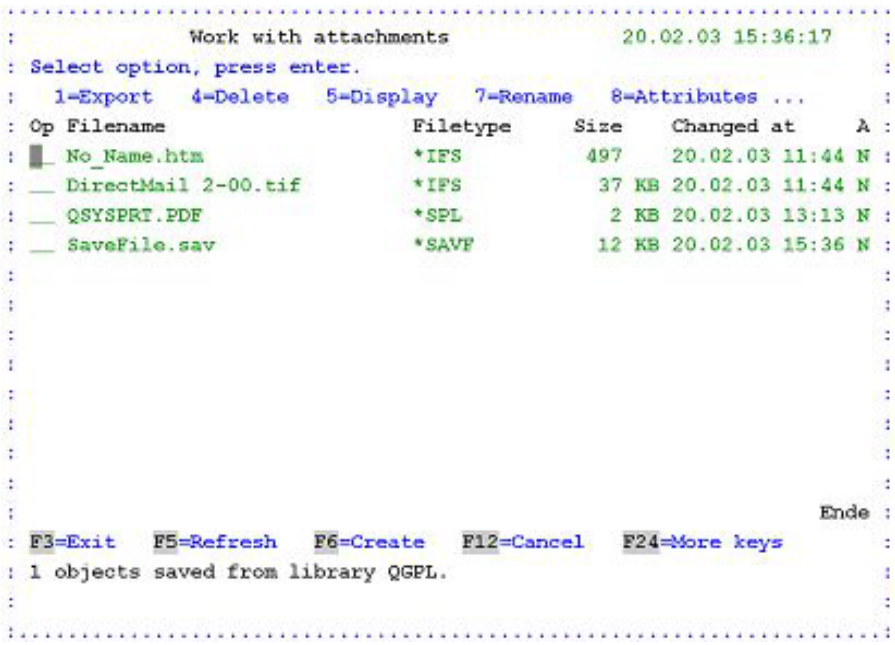
Enter the name of the object you want to back up and attach to the email as a savefile.

Library
The name of the library from which the object should be backed up.

Object types
Here you can select the type of object (*PGM, *FILE...)

Target release
This parameter is important when you are giving objects to recipients who do not have the same Release on their machines as you do.

After selecting the objects, they will be saved in a temporary savefile and attached. Afterwards the overview of the attachments will be shown again.



0099 - Overview of attachments

8.4 Attach iSeries libraries (option 5)

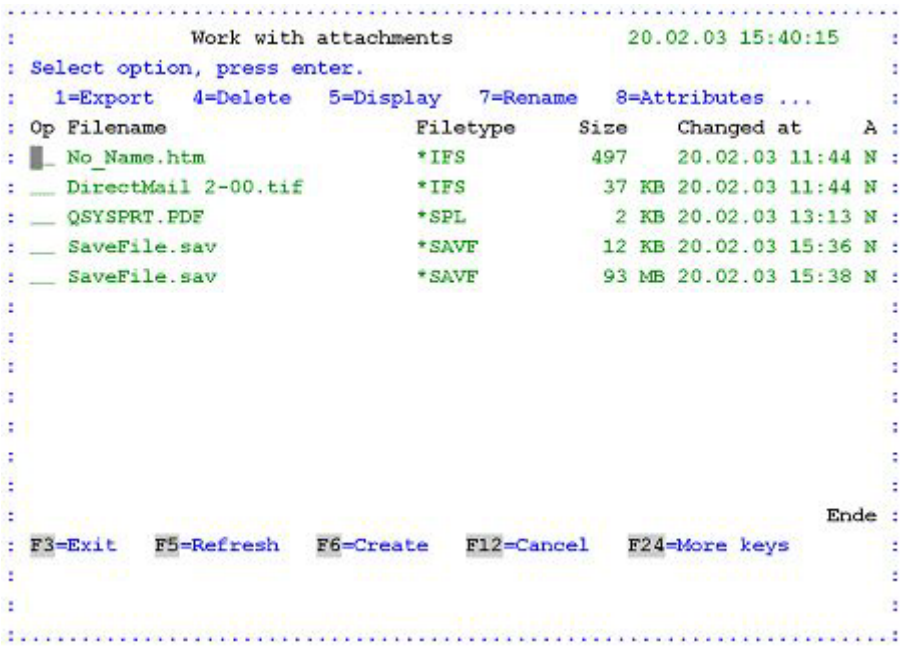
With DirectMail, a complete library can be backed up and attached to an email.

0100 - Back up and attach iSeries libraries

Library
The name of the library that is to be backed up.

Target release
With **F10** (Additional parameters), you can also set the target release with libraries. This parameter is important when you are giving objects to recipients who do not have the same Release on their machines as you do.

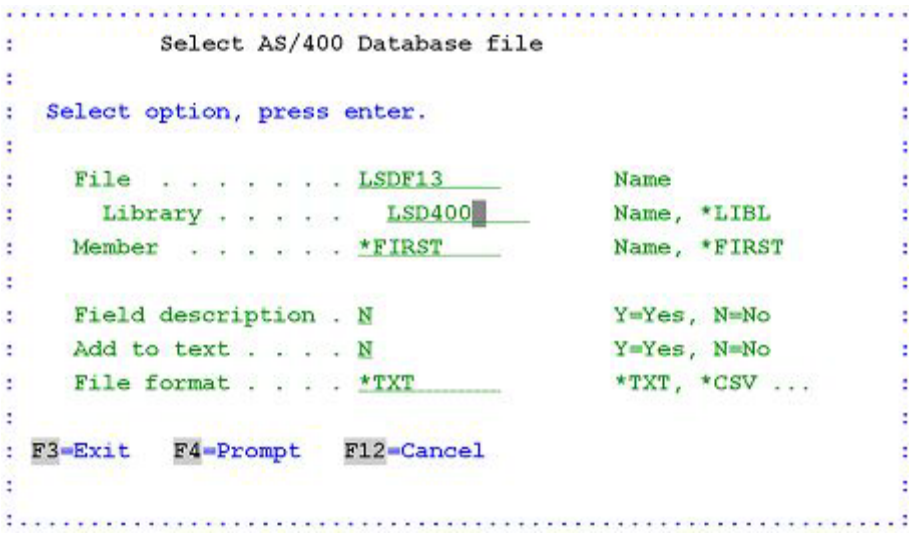
After selecting the library/libraries, they will be backed up in a temporary savefile and attached. Afterwards the overview of the attachments will be shown again.



0101 - Overview of attachments

8.5 Attach iSeries database file

With DirectMail, complete iSeries files can also be attached to an email.



0102 - Attach iSeries database

File/library
The name of the file to be backed up and its library.

Add field description (DBFLDDSC)
Specify whether the field names should be included.

The values allowed are:

Y The field descriptions will be added

N The field descriptions will not be added

Attach as text

Specify whether the file should be sent as an attachment or as a text.

The values allowed are:

Y The object content should be used as text.

N The object content should be used as an attachment.

File format

The file to be attached can be converted into a range of file formats.

The values allowed are:

***TXT** The file is converted to **TXT** format. More or less all editors can read this file format.

***CSV** The file is converted to **CSV** format. This format delimits the fields with semicolons and is ideal for further processing with spreadsheet programs like Microsoft Excel.

***HTML** The file will be converted to HTML format.

***DBASE3** The file will be converted to DBASE3 format.

After selecting the file it will be attached. Afterwards the overview of the attachments will be shown again.

```
                Work with attachments              20.02.03 15:41:03
Select option, press enter.
  1=Export   4=Delete   5=Display   7=Rename   8=Attributes ...
Op Filename                      Filetype     Size     Changed at     A
   No_Name.htm                   *IFS          497    20.02.03 11:44 N
   DirectMail 2-00.tif           *IFS           37 KB 20.02.03 11:44 N
   QSYSPRT.PDF                   *SPL            2 KB 20.02.03 13:13 N
   SaveFile.sav                  *SAVF          12 KB 20.02.03 15:36 N
   SaveFile.sav                  *SAVF          93 MB 20.02.03 15:38 N
   LSDF13.TXT                    *FILE          29 KB 20.02.03 15:41 N
                                                                  Ende
F3=Exit   F5=Refresh   F6=Create   F12=Cancel   F24=More keys
```

0103 - Overview of attachments

8.6 Export attachments (option 1)

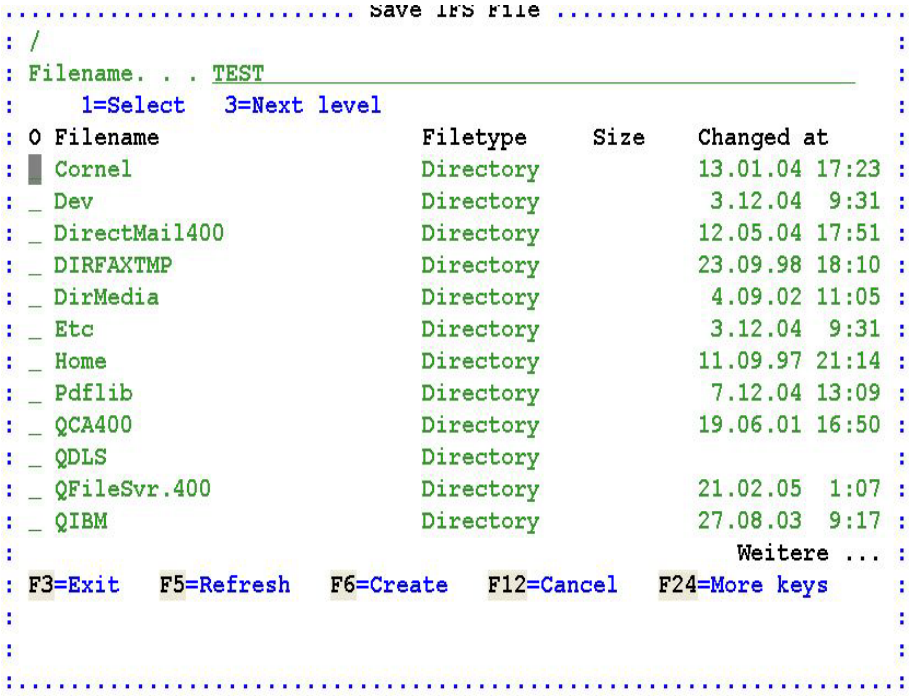
Email attachments can be converted back to their original format using the Export function.

The screens and functions in the Export function are almost identical to those of the function for creating attachments. Again, you must specify the directory in IFS for PC documents, the printer for spoolfiles or the library to which objects are restored.

0104 - Export attachment

Selection
Selection of export type.

When exporting PC documents, the directory structure of the Integrated File System of iSeries will be shown.



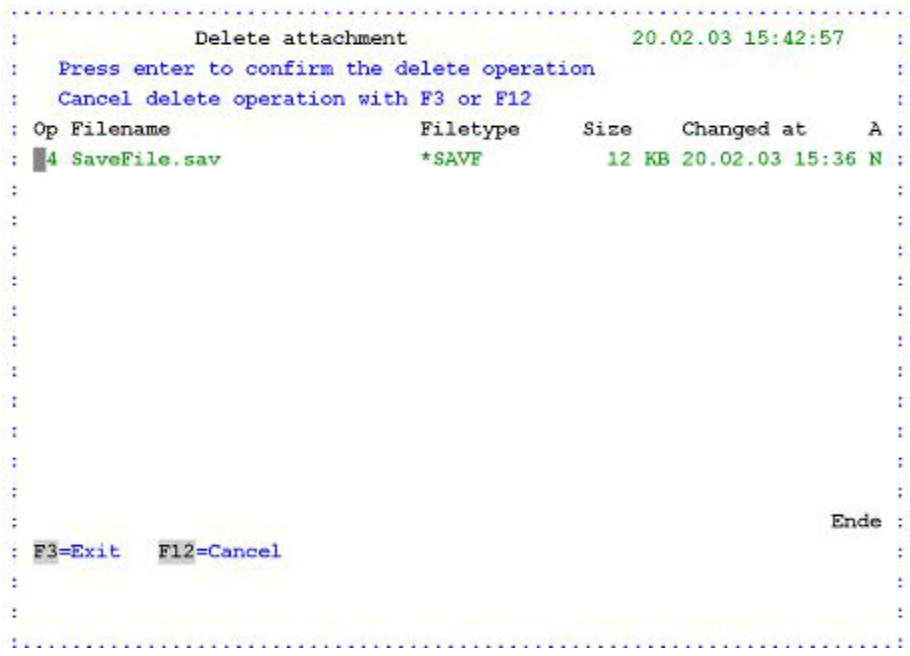
0105 - Export of PC files

Option

Select the IFS directory with Option **1**, or go to a lower level with Option **3**. Use the Enter key to save your document in the directory displayed.

8.7 Delete attachments (option 4)

Attachments you have attached to an email are not static, but can be removed from that email. Highlight the attachments to be deleted with option **4** and press the **Enter key**



0106 - Delete attachment

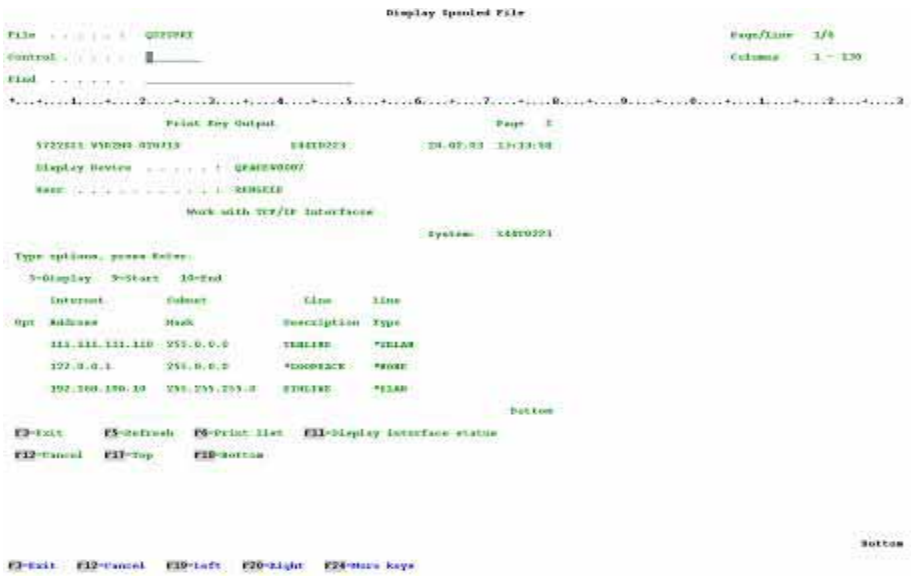
Confirm the delete with **Enter**, or return to attachment selection with **F12**.

8.8 Display attachments (option 5)

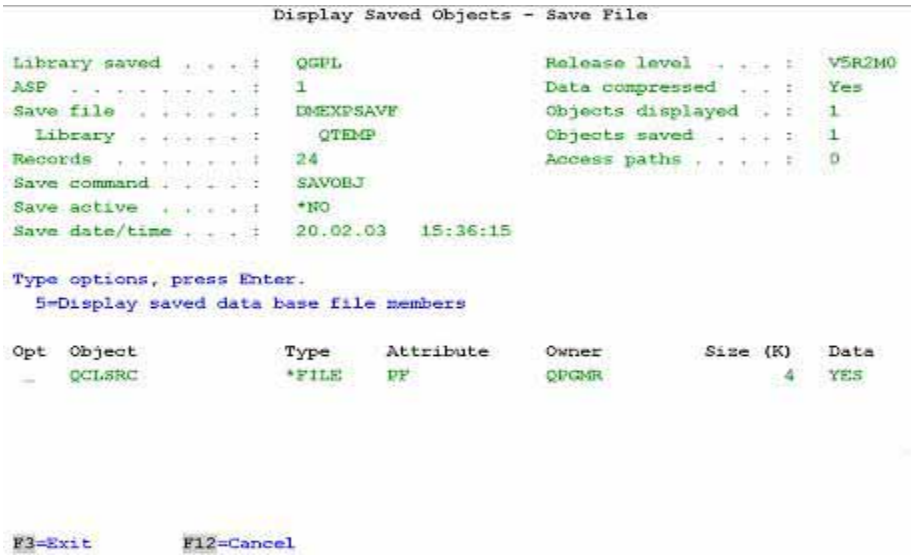
Some attachment content can be displayed directly with the display function on a 5250 screen. This is not always useful, especially when it is PC documents that are to be attached to the email. Text documents will be displayed correctly.

Provided that the DirectMedia product from Toolmaker is installed and configured, this attachment will not be opened in the 5250 emulation but in the Windows application to which it is linked. Therefore a correct display of PC documents is possible on the PC from within the 5250 session.

0107 - Display of a PC document as attachment



0108 - Display of a spoolfile as attachment



0109 - Display of saved objects as attachment

8.9 Rename attachment (option 7)

Attachments in emails can be renamed using option 7.

0110 - Renaming an attachment

New name
Enter the new name for the attachment.

8.10 Attachment attributes (option 8)

You can display the attributes for an attachment with option 8:

```
View file attributes                                Type : *SAVF

 Filename:  SaveFile.sav

 Filedate. . . . . Th 20.02.03 15:36:17
 Attached at . . . . . Th 20.02.03 15:36:17

 Filesize. . . . . 12.672 Bytes

F3=Exit    F12=Cancel
```

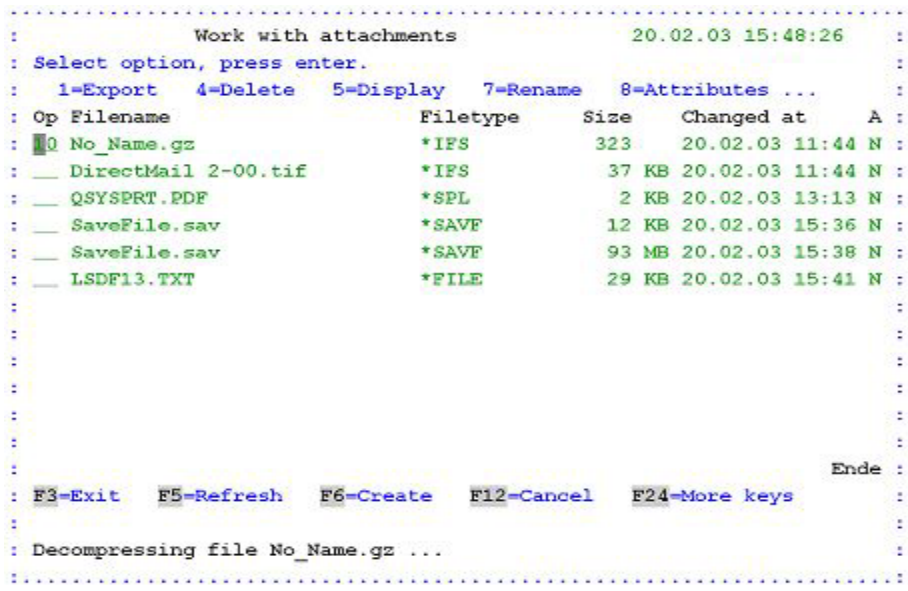
0111 – Attachment attributes

8.11 Compress attachments (option 9)

You can compress an attached file with option 9. The compressed file can be decompressed at any time with DirectMail or with other packing programs such as WinZip, PKZIP, etc.

```
                Work with attachments              20.02.03 15:48:33
Select option, press enter.
  1=Export   4=Delete   5=Display   7=Rename   8=Attributes ...
Op Filename                      Filetype     Size     Changed at     A
   No_Name                       *IFS          497     20.02.03 11:44 N
   DirectMail 2-00.tif           *IFS           37 KB  20.02.03 11:44 N
   QSYSPRT.PDF                   *SPL            2 KB  20.02.03 13:13 N
   SaveFile.sav                  *SAVF          12 KB  20.02.03 15:36 N
   SaveFile.sav                  *SAVF          93 MB  20.02.03 15:38 N
   LSDF13.TXT                    *FILE          29 KB  20.02.03 15:41 N
                                                                    Ende
F3=Exit    F5=Refresh    F6=Create    F12=Cancel    F24=More keys

Compressing file No_Name ...
```

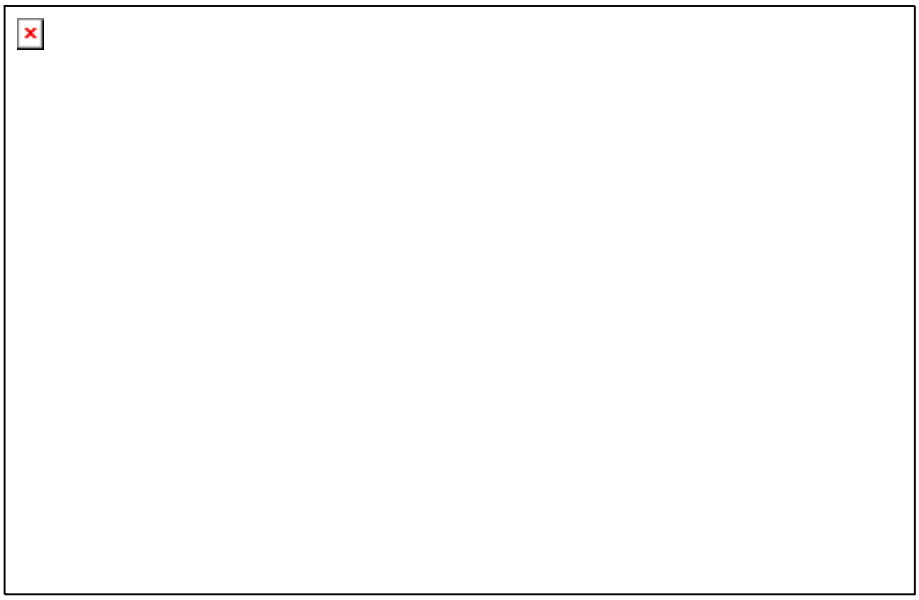
0112 – File compression



0113 - Compressed file

8.11.1.1 Decompress attachments (option 10)

You can decompress attached files with option **10**:



0114 – File decompression

9.0 E-mail Encryption and Digital Signatures

The following describes encryption and the use of digital signatures.

9.1 Encryption

DirectMail can send e-mail encrypted in S/MIME format with 128-bit encryption and a certificate.

You can also encrypt sent PDF files with up to 128-bit encryption without certification.

9.2 General

S/Mime stands for Secure Multimedia Internet Mail Extensions; and represents an extension of the MIME standards for secure e-mail transmission.

S/Mime uses the called public/private key method. This concept eliminates some fundamental weaknesses in the transmission process. In particular, it is not sufficient to intercept a code sent before the message is transmitted). In order to apply this encryption method correctly, it is important to understand its essential features and procedures.

S/MIME supports both signing and encryption of e-mail.

A signature is a guarantee to the recipient that the e-mail has not been changed during transmission over the internet. A signed e-mail is not encrypted and could therefore be read by an unauthorised person. Mail is always signed with the sender's private key. As the sender's public key is always attached to a signed e-mail, the receiver can validate the signature using the sender's attached public key.

Encryption ensures that the mail cannot be read by third parties. Mail is encrypted with the recipient's public key. The message can then be decrypted with the recipient's private key.

Note:
DirectMail saves all e-mails unencrypted. It is assumed that your system security settings are sufficient to protect mail from unauthorised access.

Public and private keys are saved in certificates. Certificates also contain other information in addition to the keys, for example the owner's e-mail address, validity period, hash codes, etc. To ensure that they are valid, certificates are usually signed by a CA (Certificate Authority).

Certificates may contain the owner's public key only (public certificate), or both the public and private keys (private certificate). If a certificate contains the private key, it must be protected from unauthorised access by a password. Only the certificate owner should have access to the private key.

Private keys are used for:

- Signing e-mail for sending (with the sender's key)

- Decrypting e-mail on receipt (with the recipient's key)

Public keys are used for:

- Encrypting when sending (with recipient's key)
- Validating signatures on receipt (with the sender's key)
- The sender's public key is attached to every signed e-mail (this can also be used to exchange a public key.)

Note:

A private key should never be accessible by anyone but the owner. Ensure that passwords are secure.

Restrictions:

- DirectMail cannot currently decrypt e-mail
- DirectMail cannot currently validate signatures
- Public keys in signed e-mail can be imported into DirectMail (as an attachment) only if "detached signatures" are used.

General notes on S/Mime

- You can encrypt and sign messages with this method, guaranteeing that the message originates with the sender indicated (a type of electronic seal).
- You have two keys, a private key and a public key.
- The private key must be kept secret. It consists of a file, which should not be circulated, protected by a password. Please choose secure password.
- The public key is a file which can be circulated. If you receive a public key, always ensure that it originates with the partner it claims to be from. You can do this physically (he has personally given the disc with the key to you) or through telephone comparison of the "fingerprint". The most practical option, however, is to authorise an independent party (Certificate Authority or CA) to carry out the validation. Once the CA has signed all communications partners' keys, communications are secure. At universities, the computer centre takes over the role of the CA. In general, this will only be accepted by users of the university network.
- You encrypt and/or sign with your private key and the recipient's public key. The recipient in turn decrypts or confirms the origin of the mail with his private and your public key. For this reason, the method is also called asymmetric encryption.

The strict hierarchy of X.509 certificates forms the basis of the S/MIME approach. X.509 certificates are used with SSL, S/MIME and IPSec.

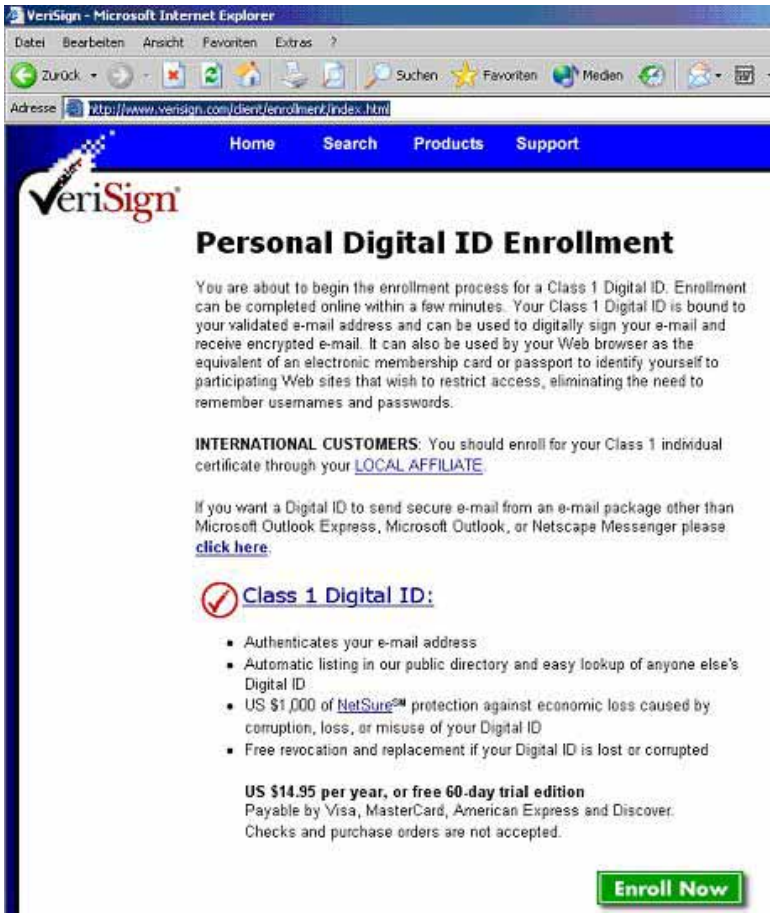
The Certificate Authority sits at the top of the hierarchy. It represents the highest authority within the PKI, or Public Key Infrastructure. X.509 digital certificates or X.509 digital signatures guarantee that the public key can be uniquely allocated to a specific user.

A Certification Authority (CA) is a "trusted third party" which issues and administers digital certificates. The CA guarantees that a public key belongs to a single, identified user. Certificates can be issued either offline or online. Online, TC Trust Center among others offer a Class 1 Certificate, providing basic security free of charge. With the Class 1 or Express Certificate[36], only the correctness of the given e-mail address is validated. TC Trust Center Class 1 Certificates require very little proof of identity. The main focus here is to test encrypted mail communication using X.509 certificates. Offline, the user has to go in person to the CA. The Trust Center Verisign[37], for example, offers a Class 3 Certificate. Assuming a Trust Center fulfils specific requirements, the signatures created with their certificates are legally binding under German law. TeleSec (Telekom) and Signtrust (Deutsche Post) are two other German providers of the "qualified signatures", presumed enable secure transmissions as defined by the German Law on Signatures as amended in March 2001. As long as a higher authority is trusted, all dependant certificates will automatically be classified as trustworthy.

9.3 Request a digital ID

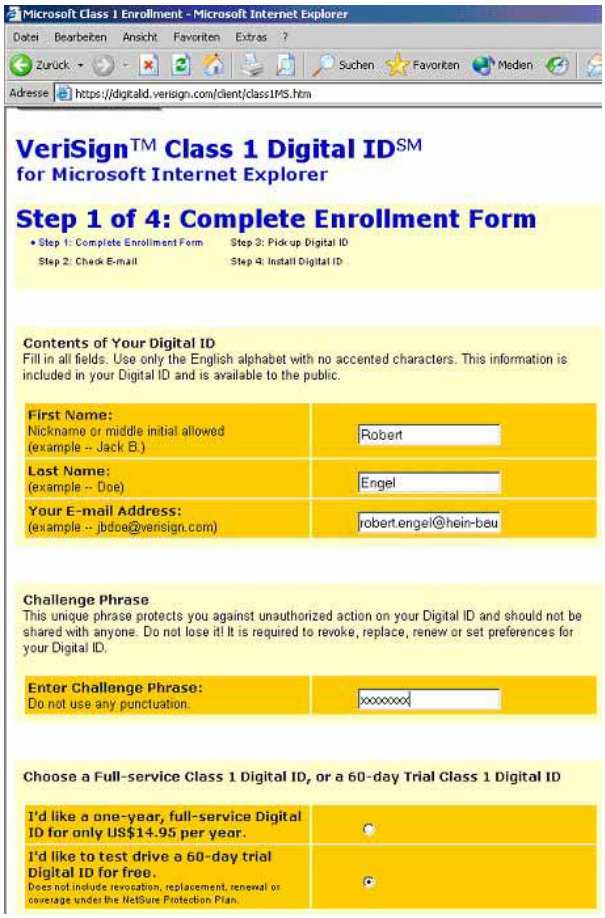
VeriSign allows you to create digital IDs valid for 60 days free of charge. The following describes the procedure for enrolment.

Use this link to go directly to the VeriSign site: http://www.verisign.com/client/enrollment/index.html



0115 – VeriSign personal digital ID enrolment

Click on the "Enroll Now" button.



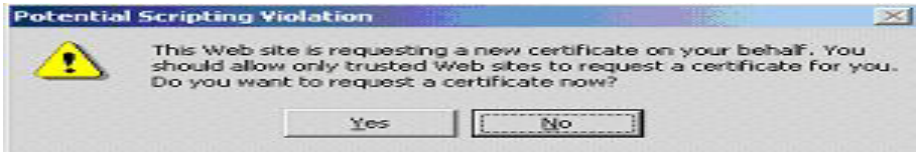
0116 – Step 1 VeriSign complete enrolment form

Enter your details in the fields. Do **NOT** tick the checkbox "Check this Box to Protect Your Private Key", otherwise DirectMail cannot process the signature.

Click on the "Accept" button to request the ID and then "OK" after confirming your email address is correct.

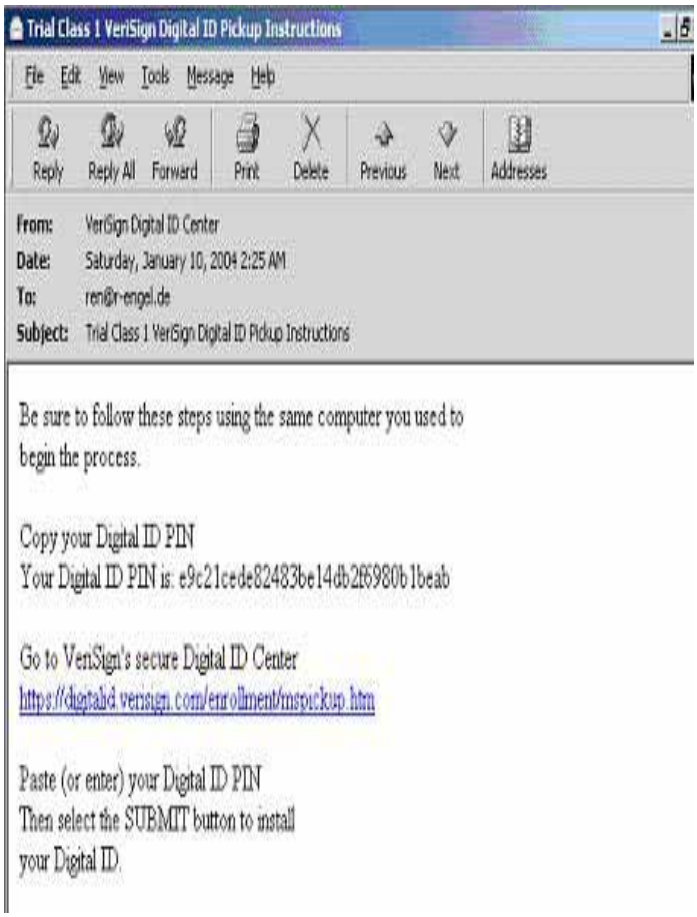
0117 – Step 2 VeriSign complete enrolment form

Select "Yes" in the following dialog.



0118 – Potential scripting violation

After a few minutes, you will receive a confirmation email from VeriSign, with a link for activating the ID. Click the link.



0119 - VeriSign digital ID pickup instructions

When the internet page is displayed, enter your PIN and click "Submit".

0120 – Step 3 Pick up digital ID

You can now install the digital ID on your computer by clicking the "Install" button.

0121 – Spet 4 Install digital ID

Confirm the messages that follow by clicking "Yes".

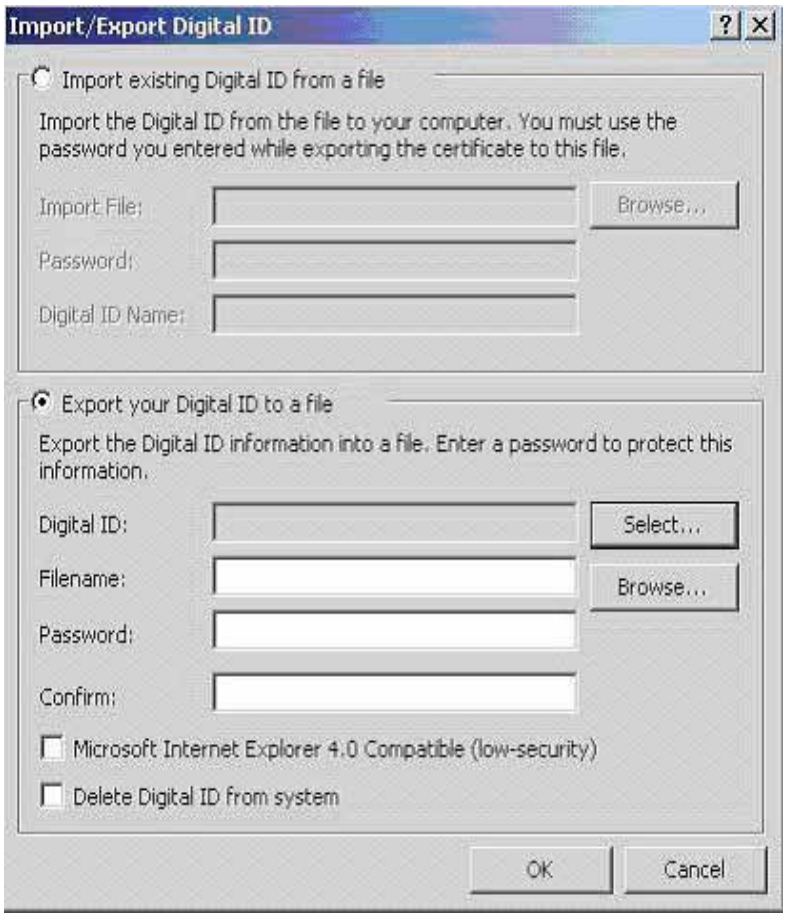
0122 – Potential scripting violation

9.4 Export a public key

The exported public key is required to encrypt outgoing e-mail to a specific recipient.

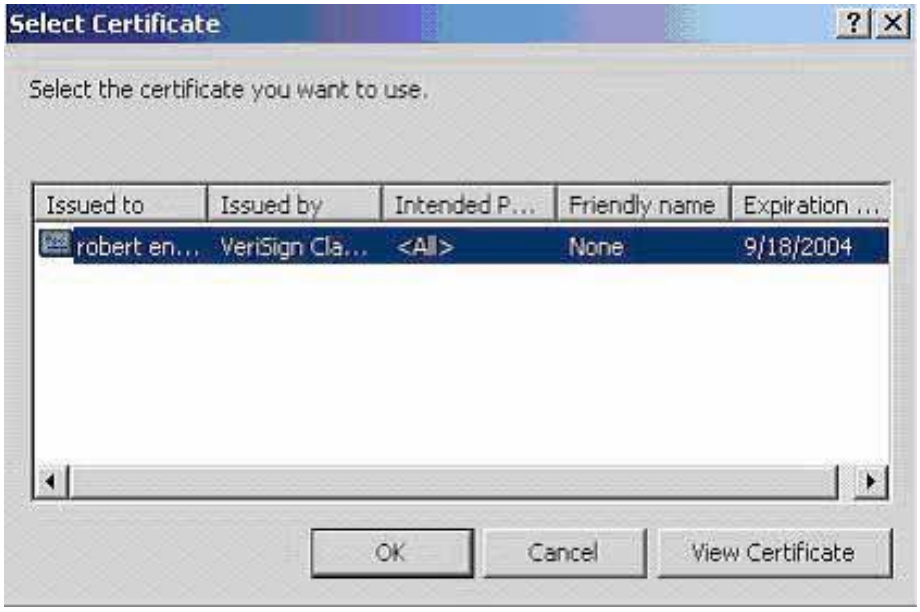
Now export the public part of your digital ID to a file and send it to your DirectMail mailbox (for example with Outlook 2000).

In Outlook, click "Tools" – "Options" – "Security" and then on the button "Import/Export Digital ID".



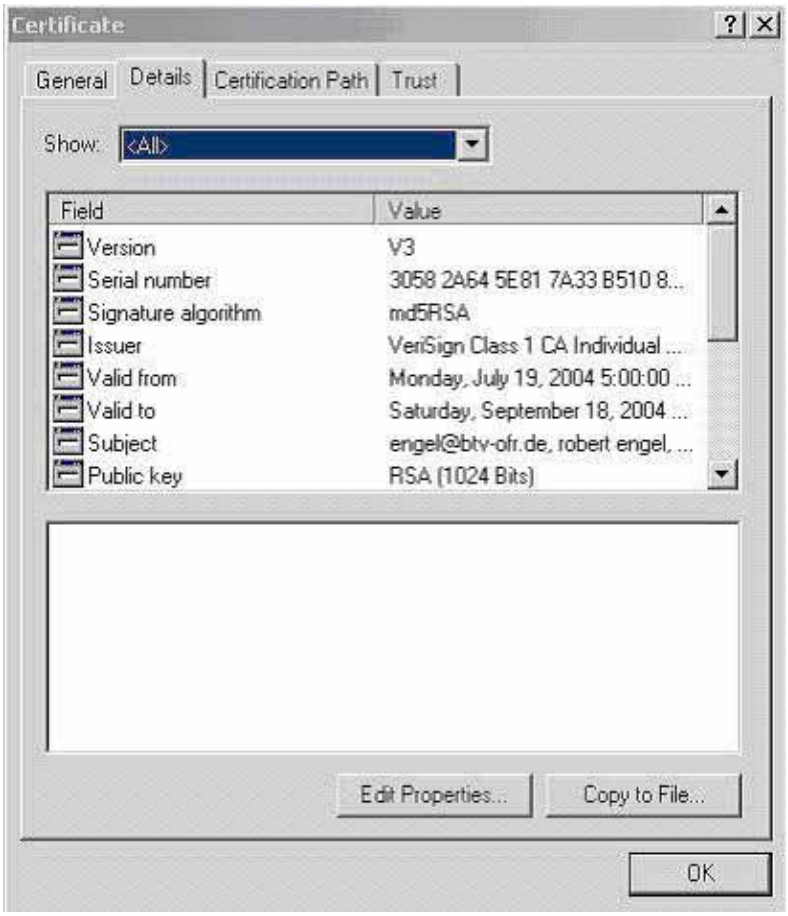
0123 – The Import/Export Digital ID dialog

Check "Export your digital ID to a file" and then click "Select".



0124 – Selecting a certificate

Select the ID you want to export and click "View Certificate".



0125 – Certificate details

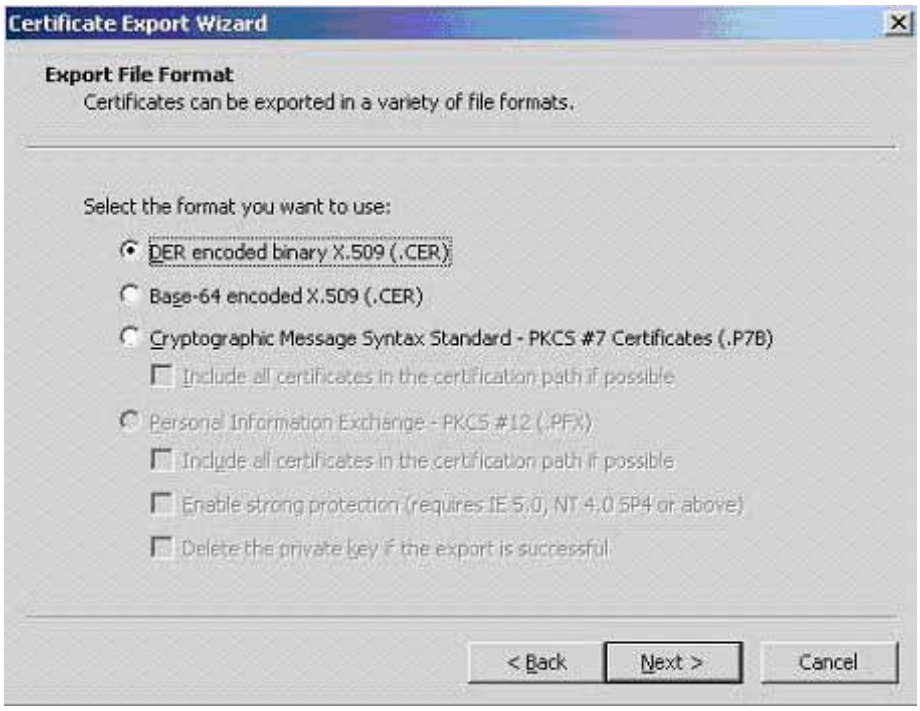
On the "Details" tab, click "Copy to File…"

0126 – The Certificate Export Wizard

Now click "Next >"

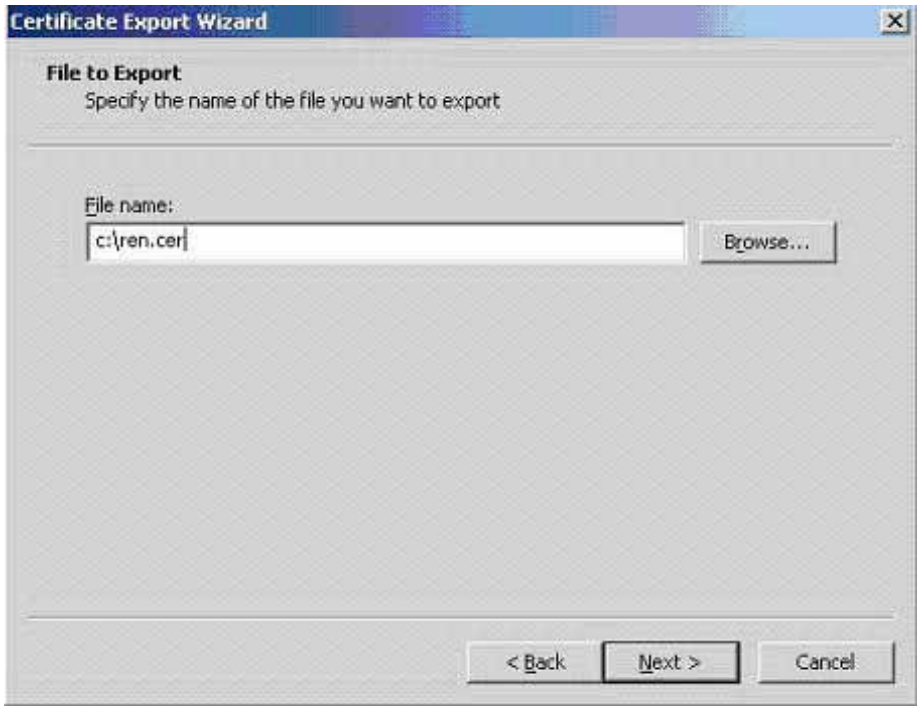
0127 – The Certificate Export Wizard, Export Private Key

Select "No, do not export the private key", then click "Next >".



0128 – The Certificate Export Wizard, Export File Format

Select the first option, "DER encoded..." and then click "Next >".



0129 – The Certificate Export Wizard, File to Export

Select a folder and a file name (with the extension .cer) and click "Next >".

0130 – Completing the Certificate Export Wizard

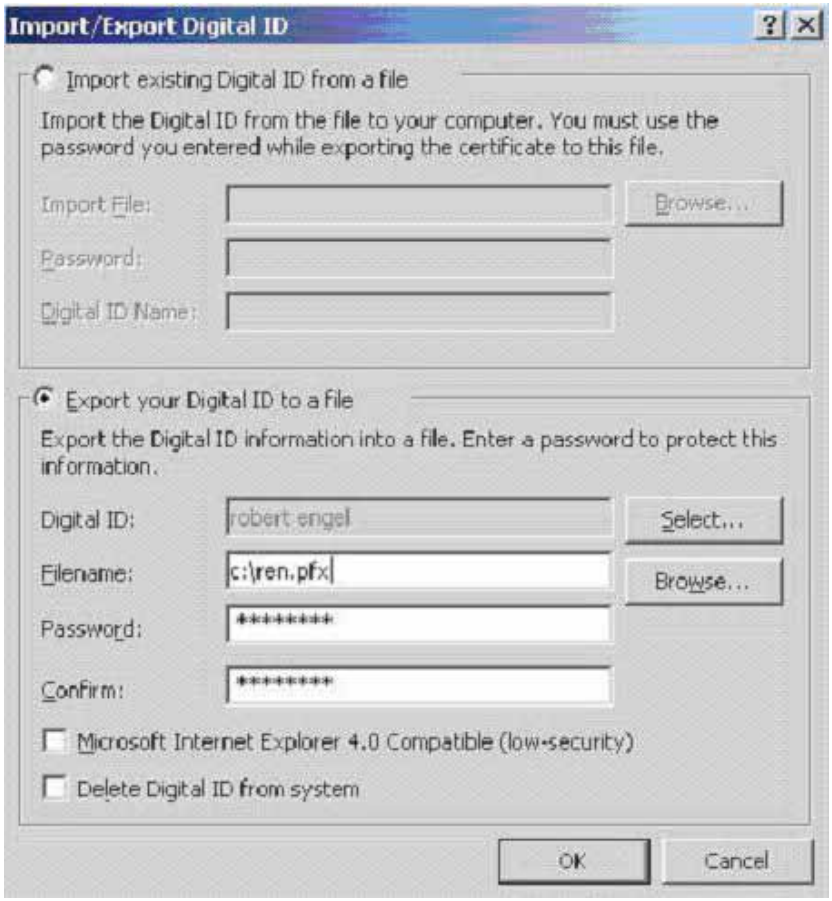
Complete the export by clicking "Finish" and send the exported file as a mail attachment to your DirectMail mailbox. From there, you can import it as described later in the document.

9.5 Export a private key

The private key is required by DirectMail to sign emails digitally.

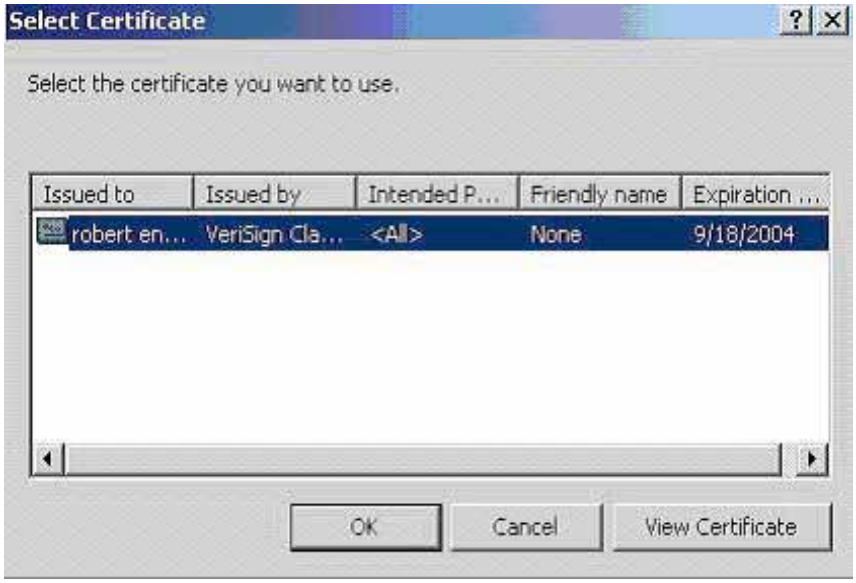
Now export the public part of your digital ID to a file and send it to your DirectMail mailbox (for example with Outlook 2000).

In Outlook, click "Tools" – "Options" – "Security" and then on the button "Import/Export Digital ID".



0131 – The Import/Export Digital ID dialog

Check "Export your digital ID to a file" and then click "Select".



0132 – Selecting a certificate

Select the ID you want to export and click "OK".

Now specify a path and name for the file, and the password for the key.

Click "OK" to export the key to the specified folder.

Complete the export by clicking "Finish" and send the exported file as a mail attachment to your DirectMail mailbox. From there, you can import it as described later in the document.

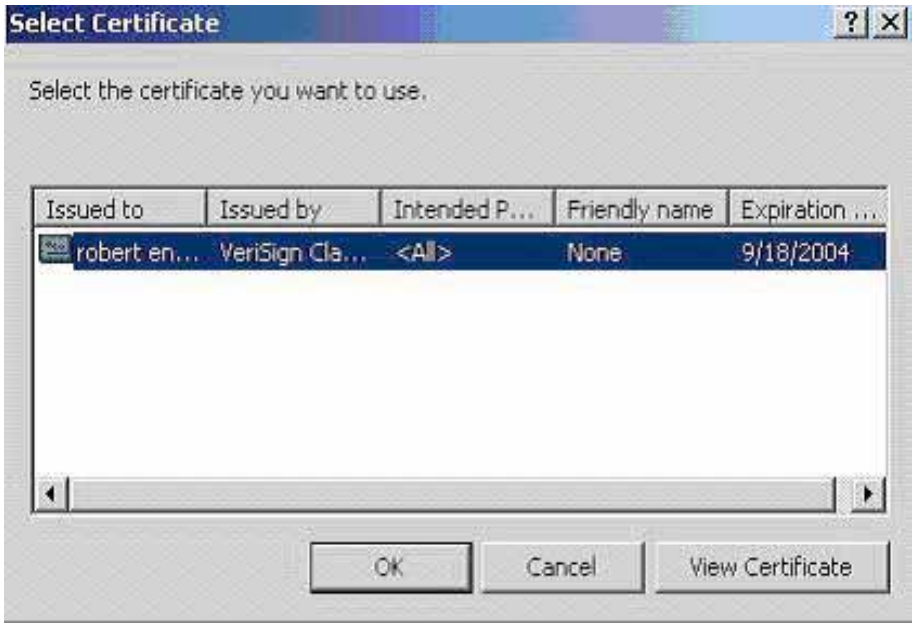
9.6 Procedure for encryption

In order to send encrypted mail, you must first save the recipient's X.509 certificate (digital IDs) in DirectMail. For every recipient to whom you want to send encrypted mail, you must first receive the certificate and then import it into DirectMail. Every certificate is linked to an e-mail address. If you have recipients with several e-mail addresses per user, you may require several certificates for each recipient.

Certificates can be integrated into DirectMail as follows:

9.6.1 Command WRKCER (Work with certificates)

With this command, you can assign one or more public certificates to every e-mail address. Certificates are imported using the IFS.



0133 – Work with recipient certificates

The folder '/Toolmaker/DirectMail400/certs/public' is the default folder. This allows you, for example, to export certificates under Windows and import them into DirectMail.

Option

Options

1=Export
Use this option to export certificates to IFS directories.

2=Change
Use this option to change the certificate details.

0134 – Changing a certificate

Email address
If the administrator has requested certificates for multiple users with the same e-mail address, you can adjust the address here. The e-mail address is the unique assignment of a certificate to a recipient.

Description
A description for your own use.

Standard
If this parameter is set to Yes, the certificate will be used when sending to the e-mail address.

The values allowed are:

Y This is the standard certificate

N This is an alternative certificate (may be changed to the standard certificate when the standard certificate expires)

Force encryption
Allows you to force encryption for all e-mail sent to this address, irrespective of or AutoMail settings.

The values allowed are:

Y E-mail to this address is always encrypted

N The settings for sending the e-mail are used

4=Delete
Use this option to delete a certificate.

5=Display

Use this option to display the contents of the certificate.

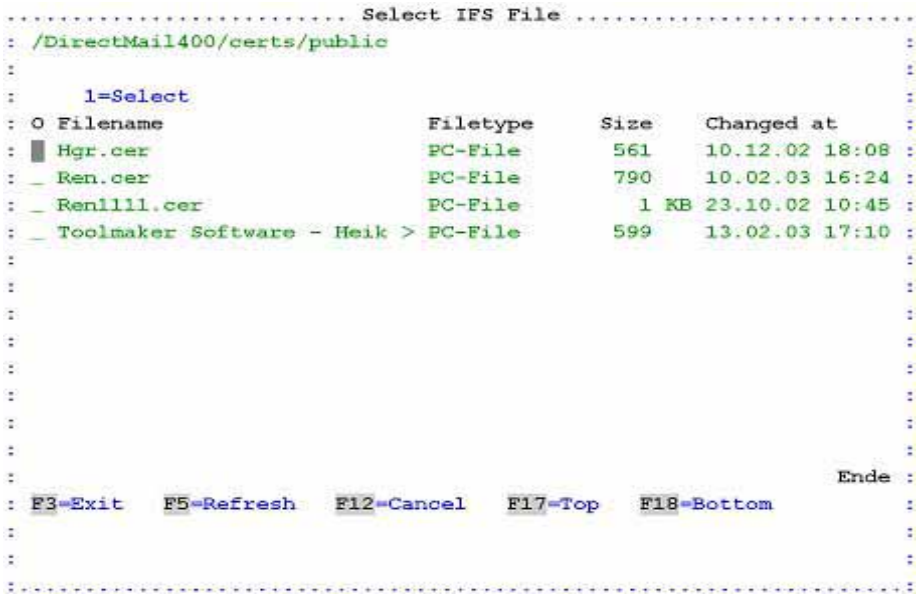
0135 – Spool file display

11=Standard

Use this option to convert an alternative certificate into a standard certificate.

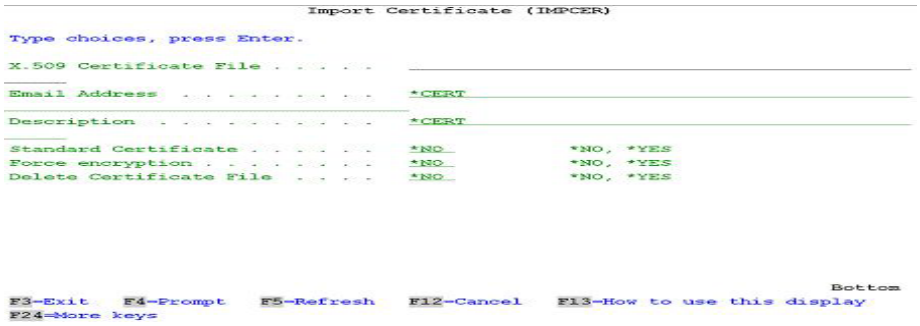
F6=Create

Used this key to create certificates in DirectMail. You can import certificate files saved in the IFS with this function.



0136 – Creating a certificate

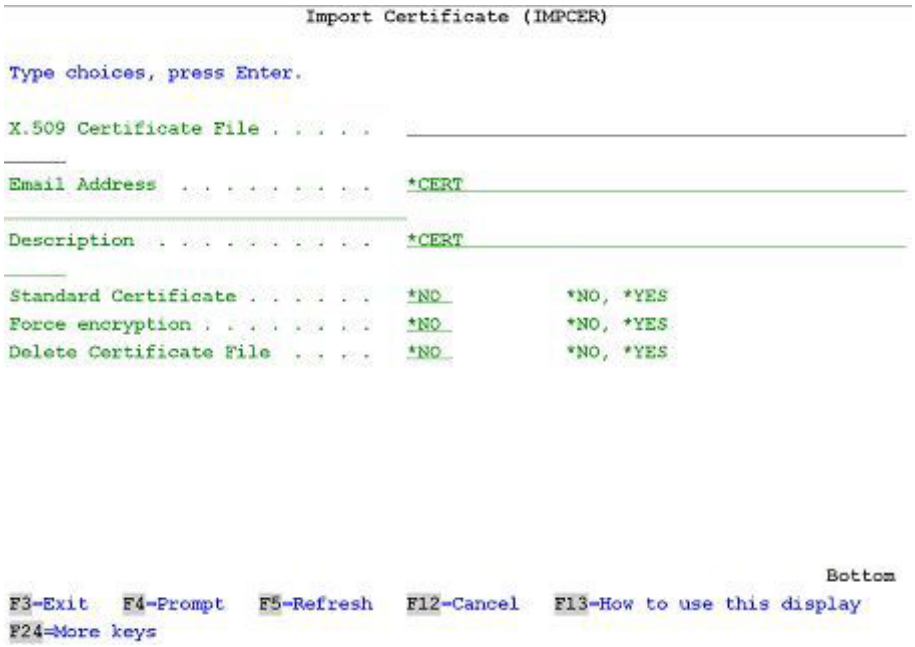
Select the certificate you want to import with option 1.



0137 – Importing a certificate

9.6.2 Command IMPCER (Import certificate)

Use this command to import certificates from the IFS into DirectMail. This is the same as F6 in the command WRKCER. IMPCER is particularly useful if you want to import certificates automatically with the Incoming Mail Assistant.



0138 – Importing a certificate

X.509 certificate file

Enter the path and name of the certificate file in the IFS.

E-mail address

This is the address with which the certificate will be linked. With the value *CERT, the import process uses the e-mail address that is saved in the certificate.

Description

A text description for the certificate.

Standard certificate
Allows you to define whether the certificate is a standard certificate or an alternative certificate for the specified e-mail address.

The values allowed are:

***YES** This is a standard certificate

***NO** This is an alternative certificate

Force encryption
Specifies that e-mail to the specified address is always encrypted.

The values allowed are:

***Yes** Emails to this address are always encrypted.

***NO** The settings for sending the email are used.

Delete certificate file
Specify whether the certificate file (.cer) should be deleted physically from the IFS after the import.

The values allowed are:

***Yes** The certificate file is deleted after the import

***NO** The certificate file remains in the IFS.

9.6.3 Work with private certificates

Within the address book, certificates for a recipient can be processed/imported using option 15.

```
:         Work with private certificates                                :
:                                                                       :
:  ENGLISH    english                                                   :
: Select option, press enter.                                           :
:      1=Export   2=Change   4=Delete   5=Display   11=Standard         :
:                                                                       :
: Op Name       Description                      valid from-to          :
:  _ REN        robert engel                  (Std) 20.07.04 - 21.09.04 :
:                                                                       :
:                                                                       :
:                                                                       :
:                                                                       :
:                                                                       :
:                                                                       :
:                                                                       :
:                                                                Bottom :
: F3=Exit   F5=Refresh   F6=Create   F12=Cancel   F17=Top   F18=Bottom  :
:                                                                       :
:                                                                       :
:                                                                       :
:.......................................................................:
```

0139 – Private certificates

Options

1=Export
Use this option to export certificates to IFS directories.

2=Change
Use this option to change the description of the certificate.

4=Delete
Use this option to delete a certificate.

5=Display
Use this option to display the contents of the certificate.

0140 – Display private certificates

11=Standard
Use this option to convert an alternative certificate into a standard certificate.

F6=Create
This function key allows you to create private certificates in DirectMail. At present you can only create your own certificates. Certificate import will be added later.

0142 – Create private certificate

Option 1 brings you to the screen for creating certificate files.

0143 – Enter certificate data, screen 1

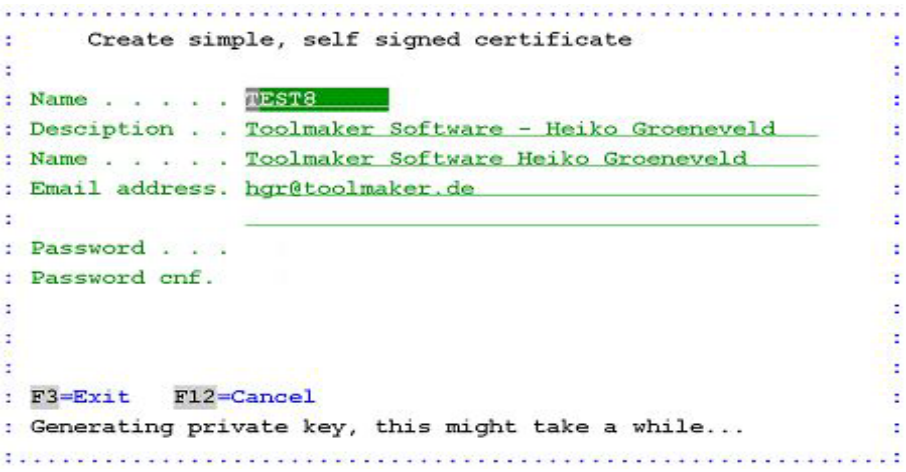
Name
A name for the certificate.

Description
The text description of your certificate

Name
The complete name of the certificate. Please ensure that it does not contain any special characters.

E-mail address
Enter the email address associated with the certificate.

Password/confirm
Certificates are protected by a password. Enter the password for your certificate twice.



0144 – Enter certificate data, screen 2

The creation of the private key can take some time depending on the performance of your iSeries.

9.6.4 Exporting certificate attachments

Every signed email automatically contains the sender's certificate. This is added as an attachment. This allows certificates to be transferred with option 1=Export to DirectMail's certificate memory. The menu 1=Export now contains the new item "4. Certificate". Certificates usually have the following file extensions: .cer .der .p7m .p7s. Attachments with these extensions are displayed by DirectMail as certificates. (Option 5=Display)

Note

DirectMail only imports detached signature certificates. That means: the signature and the certificate are added as a separate email attachment.

0145 - Exporting a certificate

0146 – Importing a certificate

Notes on certificate storage under DirectMail

The recipient's email address is the access key for certificates. You can save as many certificates as required for each email address. The standard certificate is always used for encrypting emails.

There are three possible values for the encryption parameter:

N=No -> The email is sent unencrypted.

Y=Yes -> The email is always encrypted. If no certificate for the recipient is found, the email is not sent. The email receives the status "WRN=Warning" and is placed into the error folder.

P=Possible -> The email is sent encrypted if a certificate exists, and unencrypted if no certificate is found.

Use option 25=Internet when sending email to view recipients for which no certificate exists.

9.7 Digital signatures

DirectMail supports digital signatures when sending emails. To use this function, a private certificate must first be assigned to a mailbox. This can be created and administrated with option 18=Certificate in the command WRKMBX. Certificates are password-protected stored in the path /Toolmaker/directmail400/certs/private. **Please ensure that you keep this path secure.**

To send signed emails, you must set the flag for the signature when exiting the editor or in the command OPNEMLAPI. The system checks whether a private certificate exists for the selected mailbox.

A digital signature does not imply that the email is encrypted. It indicates only whether an email has been changed.

10.0 Unicode

Computers deal exclusively in numbers. They store letters and other characters by assigning them numbers. Before Unicode was invented, there were hundreds of different encoding systems for assigning these numbers. No single encoding system offered a sufficient number of characters: For example, the European Union alone requires multiple encoding systems to cover all its languages. Even for a single language like English or German, no single encoding system really adequately covered all the letters, punctuation marks and other symbols in common use.

These encoding systems also conflict with one another. That is, two systems can use the same number for two *different* characters, or use different numbers for the *same* character. All computers (especially servers) need to support many different systems; but when data is passed between different systems or platforms, it always runs the risk of corruption.

10.1 Unicode basics

Unicode is changing all that!

Unicode provides a unique number for every character, no matter what the platform, no matter what the program and no matter what the language. The Unicode Standard has been adopted by such industry leaders as Apple, HP, IBM, JustSystem, Microsoft, Oracle, SAP, Sun, Sybase, Unisys and many others. Unicode is a prerequisite for modern standards such as XML, Java, ECMAScript (JavaScript), LDAP, CORBA 3.0, WML, etc., and is the official way to implement ISO/IEC 10646. It is supported in many operating systems, all modern browsers, and many other products. The emergence of the Unicode Standard, and the availability of tools supporting it, are among the most significant recent global software technology trends.

Incorporating Unicode into client-server or multi-tiered applications and websites offers significant cost savings over the use of legacy character sets. Unicode enables a single software product or a single website to be targeted across multiple platforms, languages and countries without re-engineering. It allows data to be transported through many different systems without corruption.

10.2 Implementation of Unicode with DirectMail

To support Toolmaker customers that have branch offices or customers in eastern European countries using different character sets, we have implemented an additional option, "Unicode", for the conversion of spooled files. This is incorporated in the product PDFlib.

10.2.1 Unicode license

You can use Unicode conversion for PDF with the license model DM400UNI.

For Unicode support of DirectMail, you can enter the PDFlib license code in the command CFGDIRMAIL in parameter UNICODELIC (format: 'IE0F0A-7E9C9B-5A0DXC-7E1E6E'). If the license key is not set to *NONE, DirectMail always tries to convert with Unicode. If you use an invalid license key, you will receive an error message. You can enter ‘0’ to test the program. During testing, pages are stamped with "www.pdflib.com".

10.2.2 Unicode fonts

A new folder, FONTS, has been added to the IFS folder /Toolmaker/DirectMail400. Copy the fonts you want to use for PDF conversion to this folder. For example, you can copy the font Courier New from the Windows font folder to FONTS.

Note
Because you cannot copy fonts using Windows Explorer, use the DOS command COPY. For example:

```
COPY C:\WINDOWS\FONTS\COUR.TTF
   x:\DirectMail400\Fonts
```

(Where x (x= mapped iSeries drive). Because some fonts are protected by copyright, it is the customers responsibility to use Windows True Type fonts.

You can use Microsoft's Font Property Tool to check font copyrights. Download it from

http://www.microsoft.com/typography/property/property.htm

The tool also indicates whether the font supports unicode.

In the ^FNT command for PDF conversion, you can now specify .TTF files for Truetype fonts. The TTF file must be located in the folder /Toolmaker/DirectMail400/Fonts. This function is only available with a DM400UNI license.

With the new PDF command ^CCS you can specify the CCSID for a spooled file. The syntax for this is:

^CCS(*JOB)	for the job CCSID (default)
^CCS(*OWNER)	for the CCSID of the spoolfile owner
^CCS(*SYS)	for the CCSID of the system value QCCSID
^CCS(n)	n=Number of the codepage (for example ^CCS(273)=German, ^CCS(37)=USA, ^CCS(880)=Cyrillic)

10.2.3 DirectMail commands and AutoMail

For the commands CVTSPLF, SNDSPLEML and WRTEMLAPI, we have added the new parameters CCSID and FONT for conversion to *EPDF.

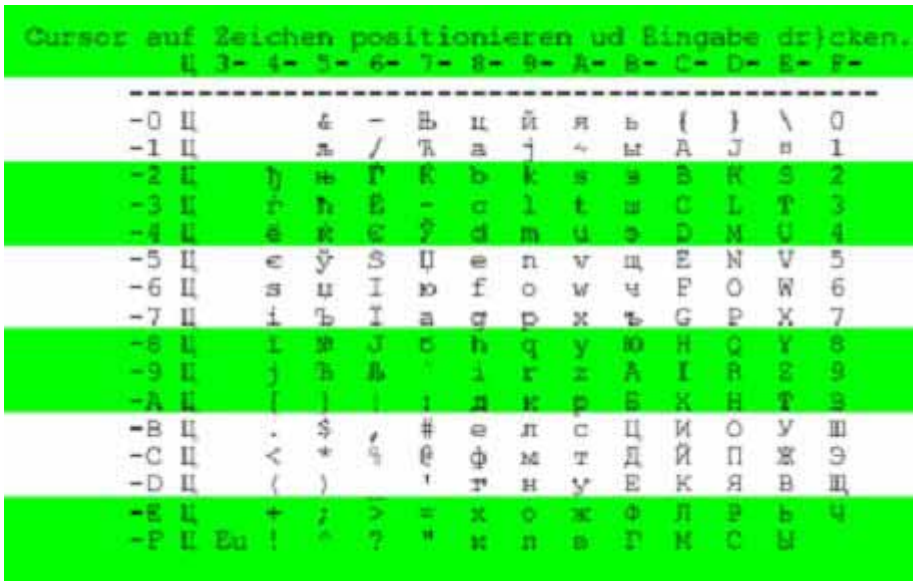
For AutoMail, we have also added the new parameters CCSID and FONT for conversion to *EPDF.

10.2.4 Test Unicode

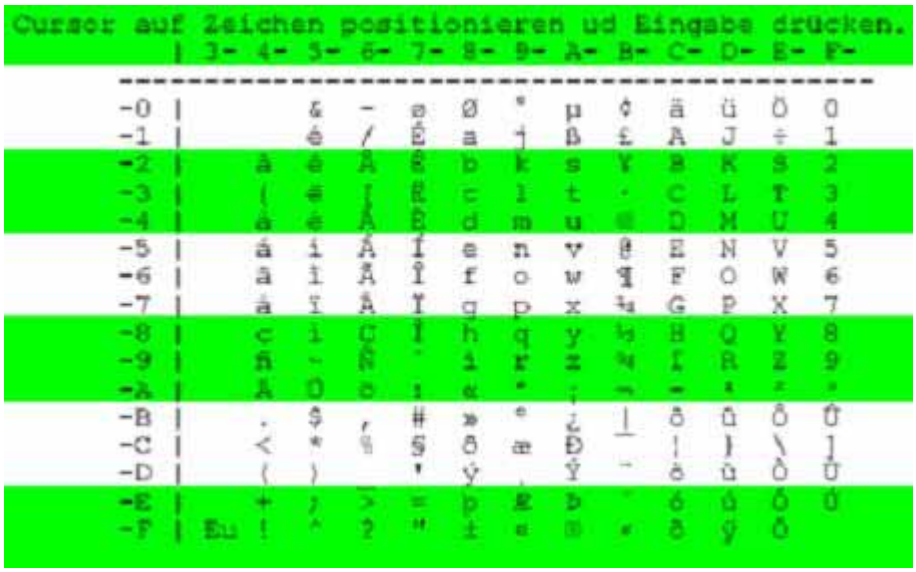
To test the Unicode feature, set the parameter UNICODELIC in the command CFGDIRMAIL to "0" and send a spoolfile with unicode characters as follows:

Create an email, switch to attachments with F10, select a spoolfile and use *EPDF as the conversion format. Set the parameter "Font" to a Truetype font and set the CCSID to 880 (Cyrillic) if you work on a German or English system.

Send the spooled file once with CCSID 880 and once with CCDIS 273 (on a German system). You will receive two PDF files, one with the German character set and one with the Cyrillic character set, as shown in the following example:



0147 - CCSID 880 – Cyrillic



0148 - CCSID 237 – German

The stamp www.pdflib.com indicates that you are using a PDFlib test license.

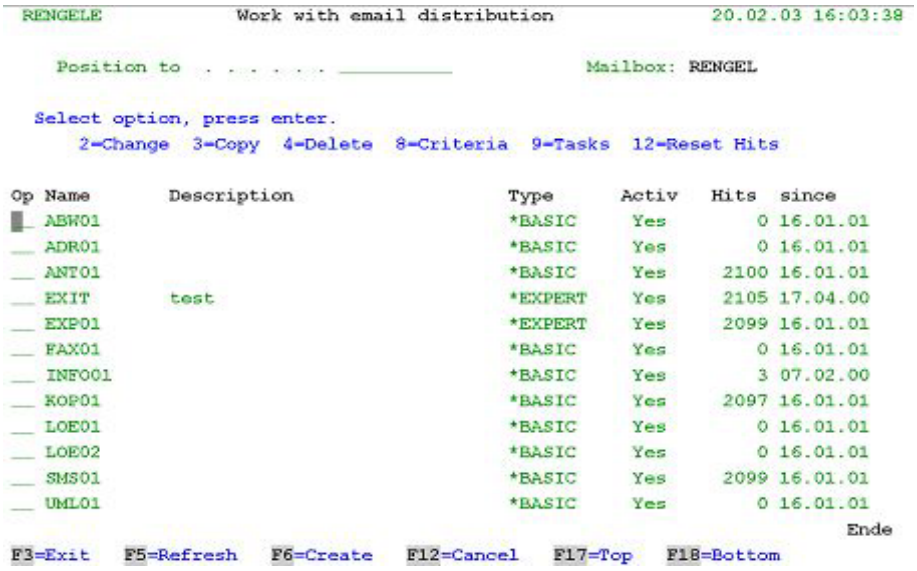
11.0 Incoming Mail Assistant

The Incoming Mail Assistant is one of the outstanding functions of DirectMail. Many functions, which are carried out interactively, like inserting addresses into the address book, routing and forwarding emails to colleagues, automatic email reply in case of absence and notification about incoming emails via mobile phone, can be automated and operated without manual intervention using the Incoming-Mail-Assistant.

The Incoming Mail Assistant can be started both globally across all mailboxes, if you select option **3** from the DirectMail menu, and for each mailbox selecting option **13** from the display “Work with Mailboxes”.

Inputs are possible in the "Simple mode", or in "Expert mode". We recommend that you gain experience first through using simple mode and then use the expert mode. In the expert mode, functions can be combined together more easily without having to repeat the definition. For example in the expert mode, you can insert the incoming email address into an address book, detour and forward emails to colleagues and send messages to the recipients’ mobile phones about the incoming emails. The sequence of actions can be freely defined in the expert mode, but is fixed in the simple mode.

Note: The function "Delete" is always executed last.



0149 - Incoming Mail Assistant

Options

2=Change

Allows you to change an existing definition, define a new filter and initiate other actions.

3=Copy

For easily duplicating existing definitions, which can then be changed.

4=Delete
Deletes a existing definition.

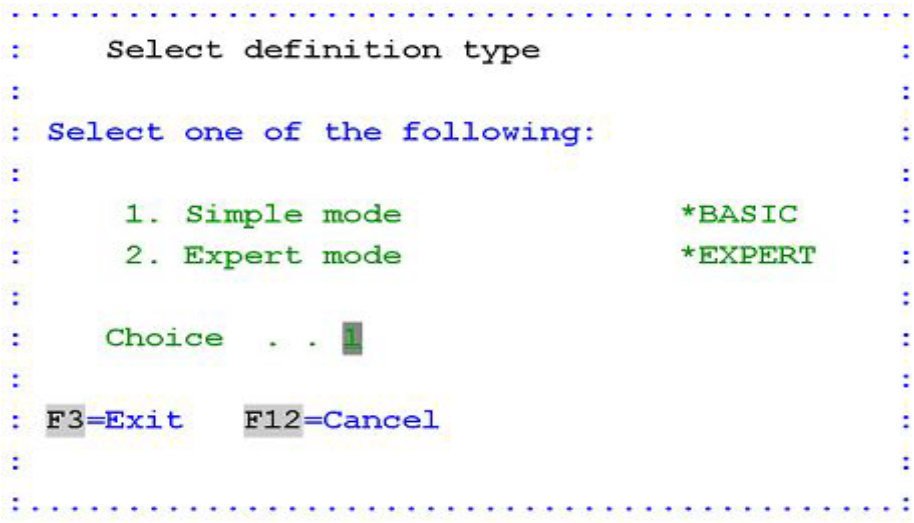
8=Criteria
Displays the definition attributes. To display attributes you must first switch from simple to expert mode.

9=Functions
Displays the functions assigned to a definition.

12=Reset hits
Resets the number of hits for each definition.

11.1 Create an Incoming Mail Assistant definition.

Use **F6** from the display "**Work with Incoming Mail Assistant**" to create a new definition. New definitions can be created in simple or expert mode.



0150 - Select definition type

Options

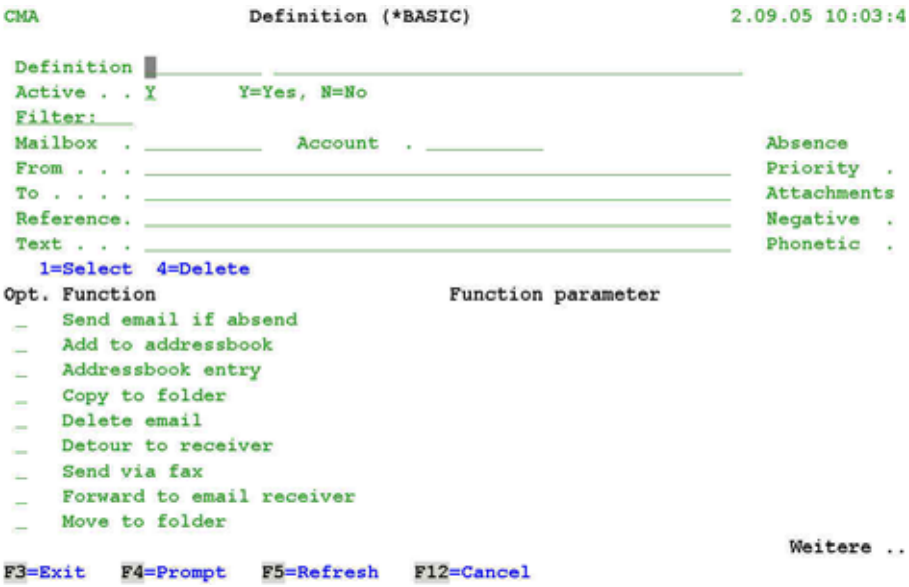
1=Simple mode
In simple mode, you can start with the Incoming Mail Assistant without any previous experience. Definitions made in simple mode can be copied to expert mode at any time.

2=Expert mode
Expert mode provides you with more flexibility and functions. Use this mode after gaining experience with simple mode.

The following demonstrates Incoming Mail Assistant functions using simple mode.

11.1.1 Create definition (F6)

Every definition is assigned a unique name which can be used to change, activate, deactivate or delete the definition at any time.



0152 – A definition in simple mode

Name
One unique name per definition.

Description
Enter the text description here.

Active
An entry can be either active or inactive. This allows you to temporarily disable functions.

The values allowed are:

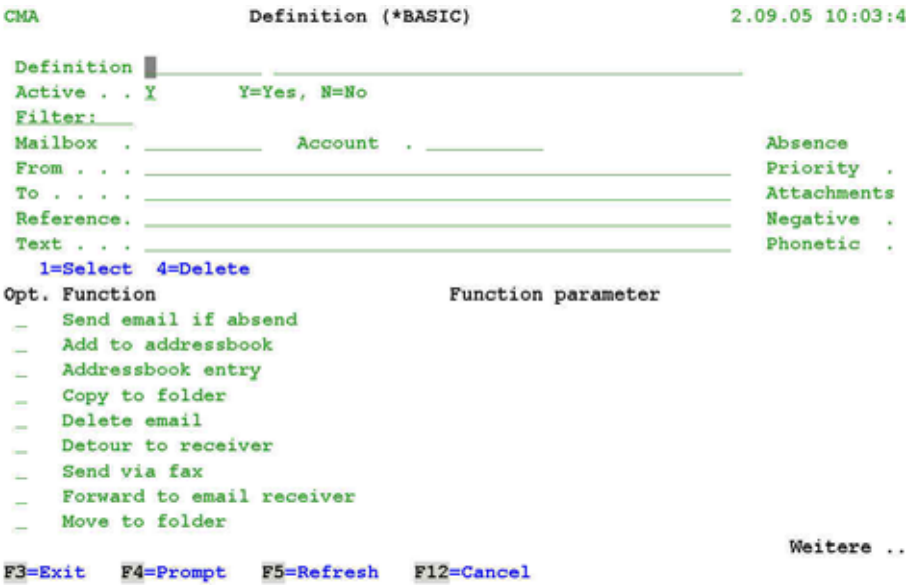
Y The definition is active

N The definition is inactive

11.1.2 Filter functions

You can limit Incoming Mail Assistant functions to selected emails using the filter function.

In the simple mode filter criteria are always “**AND**“ operations. In the expert mode you can also insert **“OR**“ operations.



0152 – A definition in simple mode

Note:

1. The definition is always executed if fields are empty. Empty fields are ignored by the selection.

2. Except for Yes/No criteria, inputs are always "String functions". The character string must occur in a field to meet the filter criteria. You can use the "?" character as a wildcard.

3. Upper and lower case characters are not distinguished.

Definition
See previous chapter

Active
See previous chapter

Mailbox
The definition refers to a mailbox if the Incoming Mail Assistant has been created from within a mailbox. Global definitions with the mailbox ***ALL** can be created from the menu.

Account
If you maintain multiple email accounts in your mailbox, you can limit the definition to one account.

Asence
Specifies whether the definition should be executed when the mailbox owner is absent.

The values allowed are:

Y The definition is executed when the owner of the mailbox is absent. For an explanation, see chapter **Absence (option 14)**Fehler! Es wurde kein Textmarkenname vergeben..

N The definition is executed if the owner of the mailbox is not absent.

From
The sender can be limited here.

Priority
Specify whether priority is included in the filter function.

The values allowed are:

H Emails with high priority are included

N Emails with normal priority are included

L Emails with low priority are included

To
The recipient can be limited here.

Attachments
Specify whether attachments are included in the filter function.

The values allowed are:

Y Emails with attachments are included

N Emails without attachments are included

Subject
The character string in the Subject field is searched.

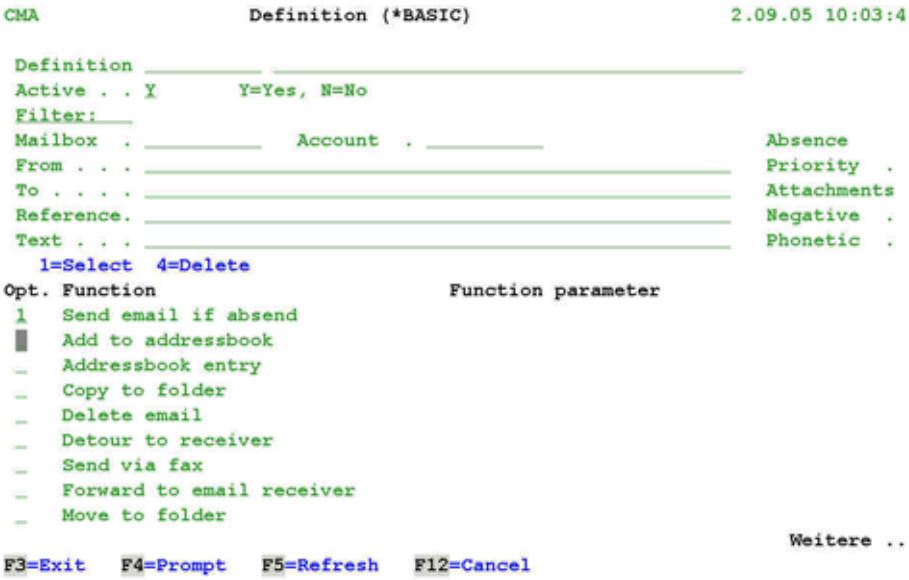
Negative
This is a global parameter which negates all declared values. That means that if you enter "**MEIER**" in the "To" field and this value is set to **N**, then all emails not addressed to "MEIER" are found.

Text
Searches for the character string in the text of the email.

Phonetic
Carries out a text search within a mailbox for recipient, sender subject and text.

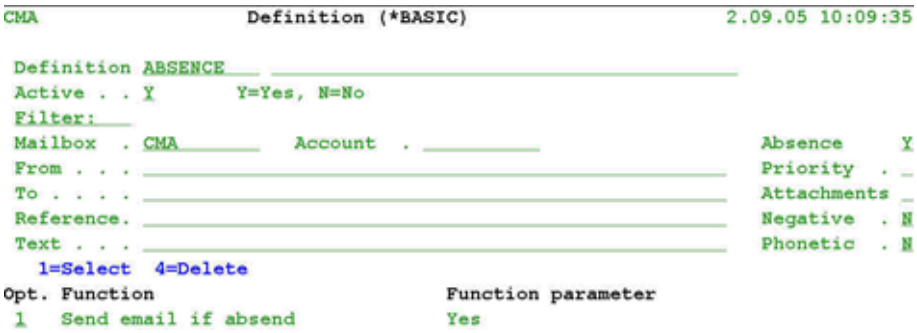
11.1.3 Absence message

This function allows you to reply to senders when you are absent. The message notifies the sender about your return.



0153 – An absence definition

To activate this function, enter **Y** in the Absence field and **1** next to the "Send email if absent".



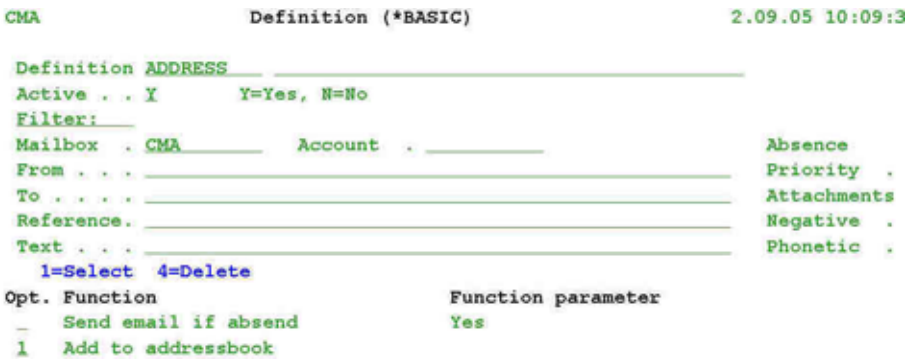
0154 – An activated absence definition

11.1.4 Create address book entry

Occasionally you may get emails from someone whose email address has not been entered yet in the address book. With this function of the Incoming Mail Assistant, this will now be something of the past. The sender of the relevant emails will automatically be added to the address book.

The function “Create address book entry” also allows you to automatically insert customers and prospects into your mailing list. In the following example, the senders of all emails with “ENTER“ stated in the Subject field are automatically inserted into an address book.

With this function, you can create mailing lists very simply as they more or less maintain themselves.



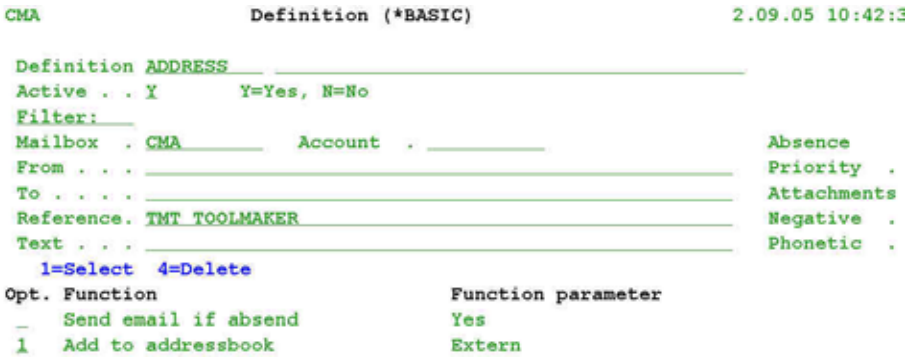
0155 – Create address entry

Create address entry

Enter your `filter criteria` and enter `1` next to the function "Create address entry".

0156 – Select folder

Select the folder into which you want to save the address book entry by entering **1**.



0157 - Create address entry in the folder Extern

11.1.5 Delete address entry

In the same way, you can automatically delete address entries from address books, if the sender of the email notifies that he does not want any more information.

```
CMA                    Definition (*BASIC)                  2.09.05 10:48:48

 Definition DELADDR
 Active . . Y        Y=Yes, N=No
 Filter:
 Mailbox  . CMA        Account  .                          Absence     _
 From . . .                                                Priority  . _
 To . . . .                                                Attachments _
 Reference. DELETE                                         Negative  . N
 Text . . .                                                Phonetic  . N
   1=Select  4=Delete
Opt. Function                        Function parameter
 _   Send email if absend            Yes
 _   Add to addressbook              Extern
 _   Addressbook entry
```

0158 - Delete address book entry

Enter your **filter criteria** and enter **1** next to the function "Delete address entry".

```
                        Select folder                  20.02.03 16:17:17
 Select option, press enter.
  1=Select    5=Display
 o  Folder                  Description
 1  Extern                  Externe Adreßbücher
 _  NEU                     Privates Adreßbuch für NEU
 _  System                  DirectMail Adreßbücher
 _    Benutzer              DirectMail Benutzer
 ■
                                                                      Ende
 F3=Exit    F5=Refresh    F12=Cancel    F17=Top    F18=Bottom
```

0159 – Select folder

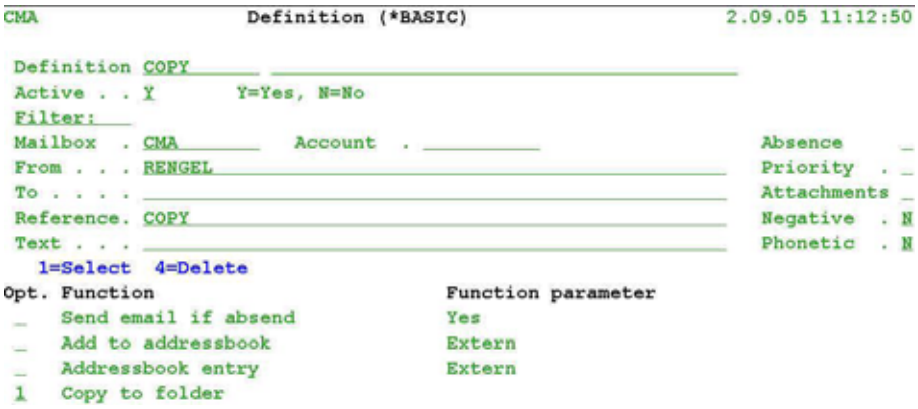
Select the address book from which the address should be deleted by entering **1**.

```
CMA                    Definition (*BASIC)                  2.09.05 10:48:48

 Definition DELADDR
 Active . . Y        Y=Yes, N=No
 Filter:
 Mailbox  . CMA        Account  .                          Absence     _
 From . . .                                                Priority  . _
 To . . . .                                                Attachments _
 Reference. DELETE                                         Negative  . N
 Text . . .                                                Phonetic  . N
   1=Select  4=Delete
Opt. Function                        Function parameter
 _   Send email if absend            Yes
 _   Add to addressbook              Extern
 _   Addressbook entry               Extern
```

0160 - Delete address entry from external address book

11.1.6 Copy email to folder

Here you can copy incoming emails into your folder structure in accordance with filter criteria. For example, email from the sales department can be moved directly in the "Sales" folder.



0161 - Copy email to folder

Enter your **filter criteria** and enter **1** next to the function “Copy to folder”.

0162 - Select folder

Select the folder to which you want to copy the email using option **1**. Use option **5** to expand or contract the folder structure.

0163 - Structure displayed

```
CMAENG              Definition (*BASIC)                  8.09.05 15:25:35

 Definition COPY_____ Copy E-Mail in folder
 Active . . Y       Y=Yes, N=No
 Filter:___
 Mailbox  . CMA_____    Account  . _________              Absence     _
 From . . . RENGEL                                       Priority  . _
 To . . . . _____________________________________________ Attachments _
 Reference. DELETE                                       Negative  . N
 Text . . . _____________________________________________ Phonetic  . N
   1=Select  4=Delete
Opt. Function                          Function parameter
 _   Send email if absend
 _   Add to addressbook
 _   Addressbook entry
 _   Copy to folder                    CMAENG
```

0164 - Email copied to folder CMA/deleted

11.1.7 Delete email automatically

Everyone dislikes spam and junk mail. This Incoming Mail Assistant function allows you to delete unwanted emails automatically and immediately. The function is only executed after all other functions. (Also in expert mode)

```
CMA                 Definition (*BASIC)                  2.09.05 10:48:48

 Definition DELETE___ _____________________________________
 Active . . Y       Y=Yes, N=No
 Filter:___
 Mailbox  . CMA_____    Account  . _________              Absence     _
 From . . . _____________________________________________ Priority  . _
 To . . . . _____________________________________________ Attachments _
 Reference. DELETE                                       Negative  . N
 Text . . . _____________________________________________ Phonetic  . N
   1=Select  4=Delete
Opt. Function                          Function parameter
 _   Send email if absend              Yes
 _   Add to addressbook                Extern
 _   Addressbook entry                 Extern
 _   Copy to folder
 1   Delete email
```

0165 - Delete email automatically

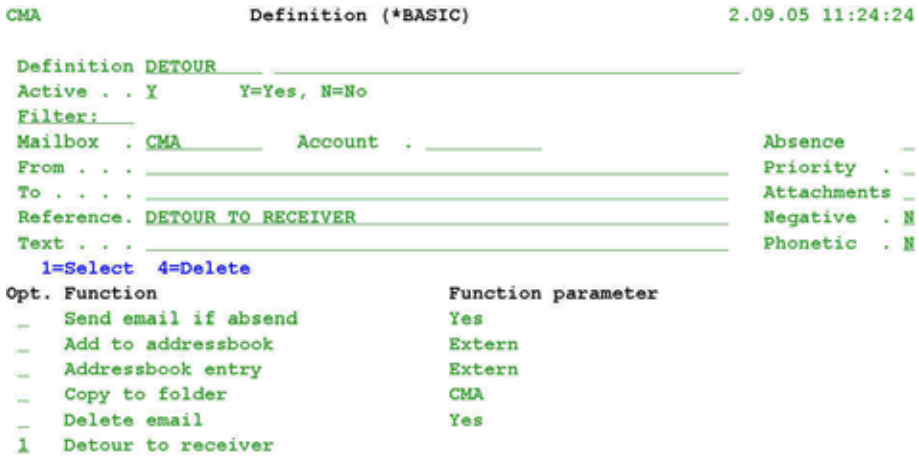
Enter your `filter criteria` and enter `1` next to the function “Delete email”.

```
CMA                 Definition (*BASIC)                  2.09.05 11:24:24

 Definition DELETE___ _____________________________________
 Active . . Y       Y=Yes, N=No
 Filter:___
 Mailbox  . CMA_____    Account  . _________              Absence     _
 From . . . RENGEL                                       Priority  . _
 To . . . . _____________________________________________ Attachments _
 Reference. DELETE                                       Negative  . N
 Text . . . _____________________________________________ Phonetic  . N
   1=Select  4=Delete
Opt. Function                          Function parameter
 _   Send email if absend              Yes
 _   Add to addressbook                Extern
 _   Addressbook entry                 Extern
 _   Copy to folder                    CMA
 _   Delete email                      Yes
```

0166 – BUY CHEAP emails automatically deleted

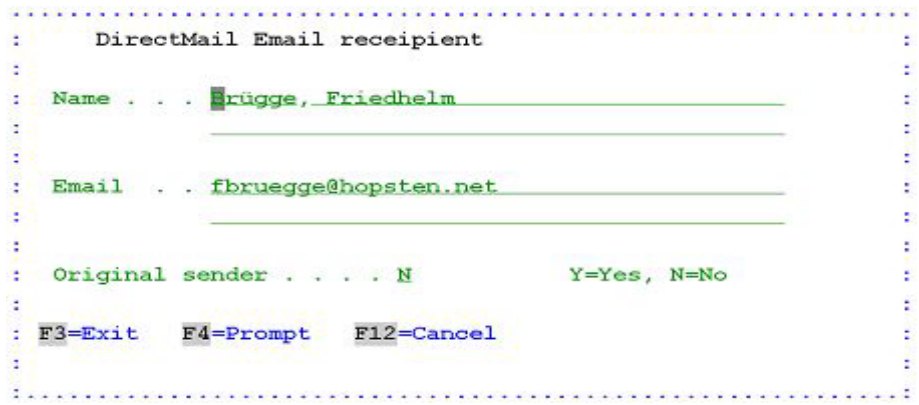
11.1.8 Detour email

Emails that are not for you can be detoured to the appropriate recipient with DirectMail. You can also use the same function, when absent, to detour your emails to your home address or to a colleague.



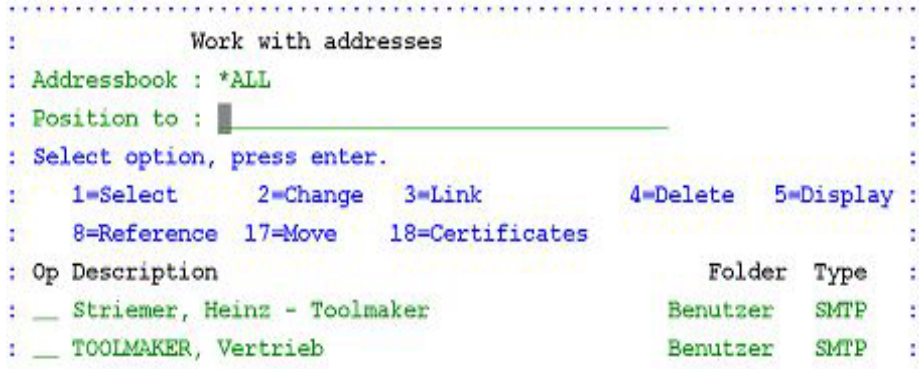
0167 - Detour email

Enter your **filter criteria** and enter **1** next to the function "Detour to receiver".



0168 - Select email recipient

Here you can enter the recipient's **email address** directly or select the address from the address book with **F4**.



0169 - Select address

Enter **1** in front of the address to be copied. Here you can use all functions previously described in the chapter **Address book (option 12)Fehler! Es wurde kein Textmarkenname vergeben.**.

Note: If you copy an address with option **1**, but no email address appears in the following screen, this may be because the address does not contain an email address.

Original sender

Forwarded and detoured emails can optionally contain the original sender's name or the mailbox name of the sender who has forwarded or detoured the email.

The values allowed are:

Y The address from the original message is used.

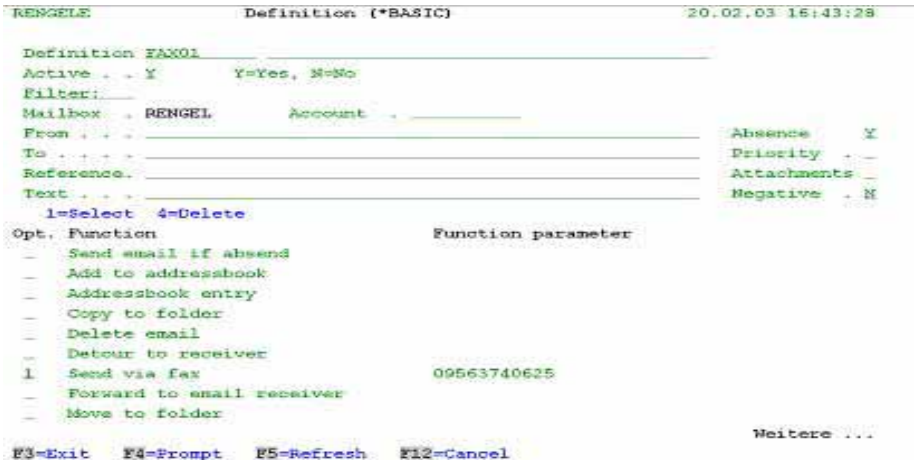
N The address from the mailbox from which the mail has been forwarded/detoured is used.

```
CMAENG              Definition (*BASIC)                  8.09.05 15:34:56

 Definition FAX       E-Mail via fax
 Active . . Y       Y=Yes, N=No
 Filter:
 Mailbox  . CMA       Account  . _________                Absence     _
 From . . . RENGEL                                       Priority  . _
 To . . . . _____________________________________________ Attachments _
 Reference. _____________________________________________ Negative  . N
 Text . . . _____________________________________________ Phonetic  . N
   1=Select  4=Delete
Opt. Function                        Function parameter
  _   Send email if absend
  _   Add to addressbook
  _   Addressbook entry
  _   Copy to folder                 CMAENG
  _   Delete email
  _   Detour to receiver
  1   Send via fax                   09563740625
```

0170 - Detour to recipient pc2@messe.de

11.1.9 Send to a fax recipient

With this function you can also reach recipients who do not have an email address. If you have installed DirectFax from TOOLMAKER on your iSeries, the email text will be converted into a fax and delivered to the recipient via fax.



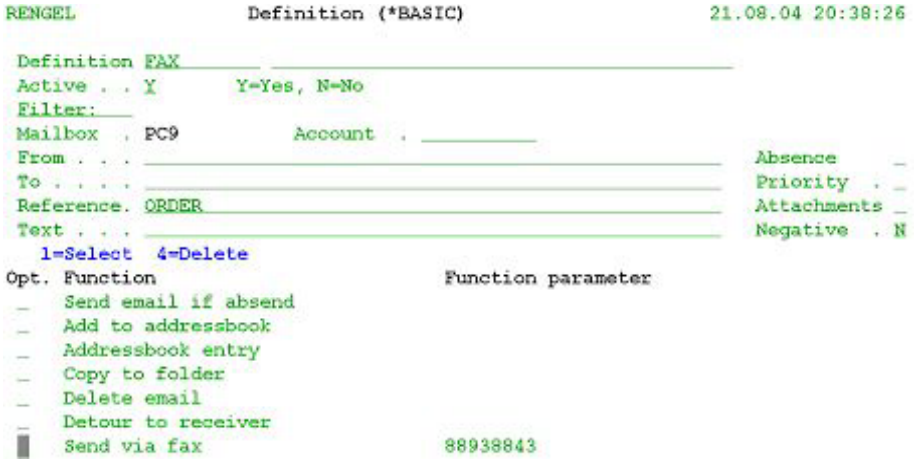
0171 - Send to a fax recipient

Enter your **filter criteria** and enter **1** next to the function “Send via fax“.

0172 – Forward email to fax

Select fax recipient

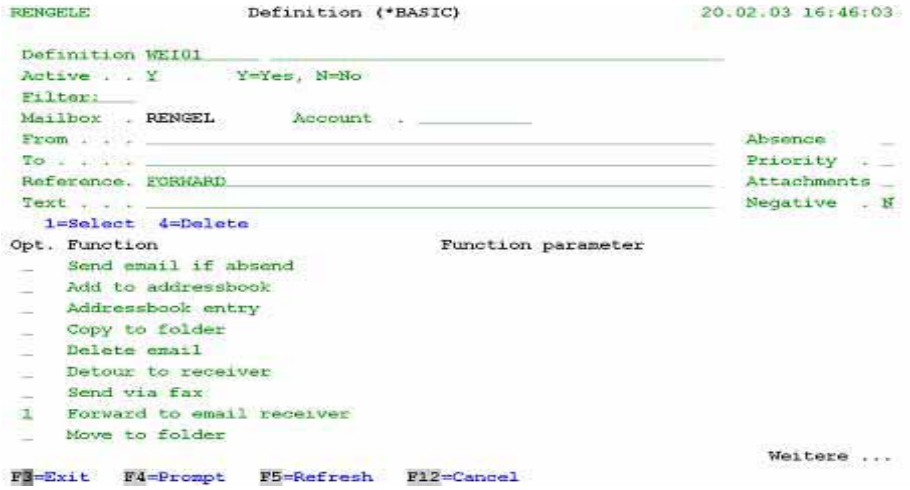
Enter the recipient’s **fax number** or select an address from the address book using **F4**. ***OWNER** sends the email to the fax number that is contained in the address entry of the recipient’s mailbox.



0173 - Send email by fax

11.1.10 Forward email

Similar to detouring, you can forward an incoming email to your home address or to a colleague. In this case the original email remains with you.



0174 - Forward email

Enter your **filter criteria** and enter **1** next to the function "Forward to email receiver".

0175 - Specify email recipient

Enter the **email address** of the recipient in the email field or select the recipient from the address book using **F4**.

Name
Email recipient

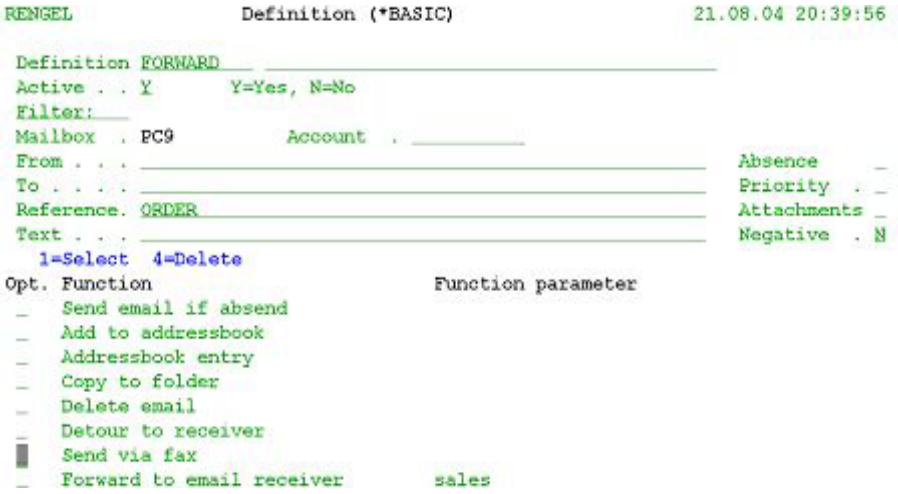
Email
Email address of recipient

Original sender
Forwarded and detoured emails can optionally contain the original sender's name or the mailbox name of the sender who has forwarded or detoured the email.

The values allowed are:

Y The address from the original message is used.

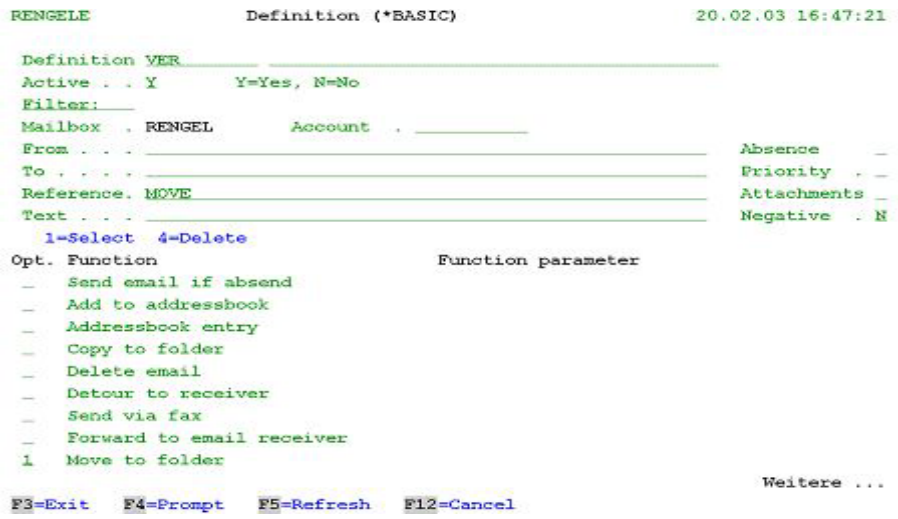
N The address from the mailbox from which the mail has been forwarded/detoured is used.



0176 - Forward to recipient pc2@messe.de

11.1.11 Move to folder

Allows you to move an incoming email to a folder.

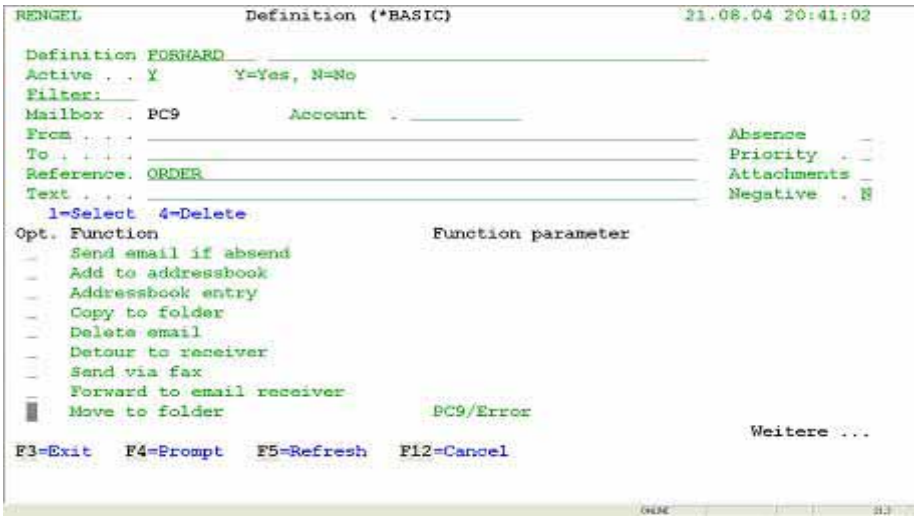


0177 - Move emails

Enter your **filter criteria** and enter **1** next to “Move to folder”.

0178 - Select folder

Enter option **1** next to the required folder. You can use option **5** to show or hide the folder structure.



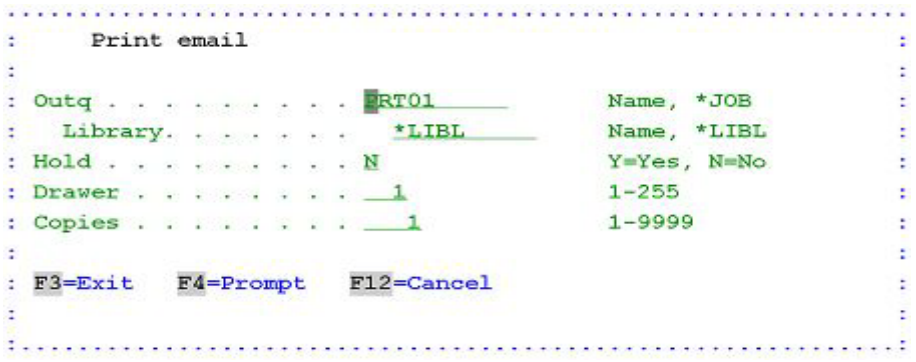
0179 – Move email to the folder PC01/Outbox/Archive

11.1.12 Print email text

You can automatically print the header as well as the text body of an incoming email.

0180 - Print email

Enter your **filter criteria** and enter **1** next to the option “Print email text”.



0181 - Select printer

Outqueue

Outqueue from where the message text shall be printed

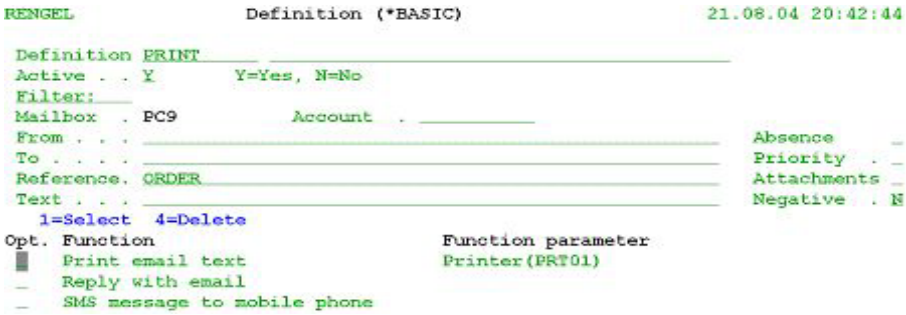
Library

The outqueue's library.

Hold
Optionally the print can be set to hold.

Paper tray
Indicates the paper tray.

Copies
The number of copies is free of choice.



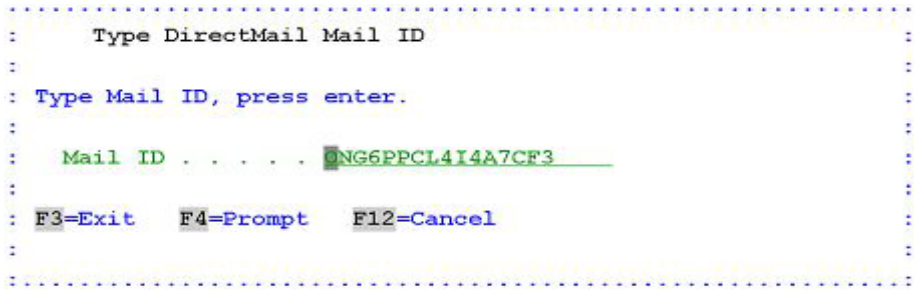
0182 - Print emails to PRT01

11.1.13 Reply to email

You can automatically reply to incoming emails using DirectMail. For example, you can send a reply to customers who order by email, confirming that the email has arrived and the order is being processed.

0183 - Reply automatically to email.

Enter your **filter criteria** and enter **1** next to "Reply with email".

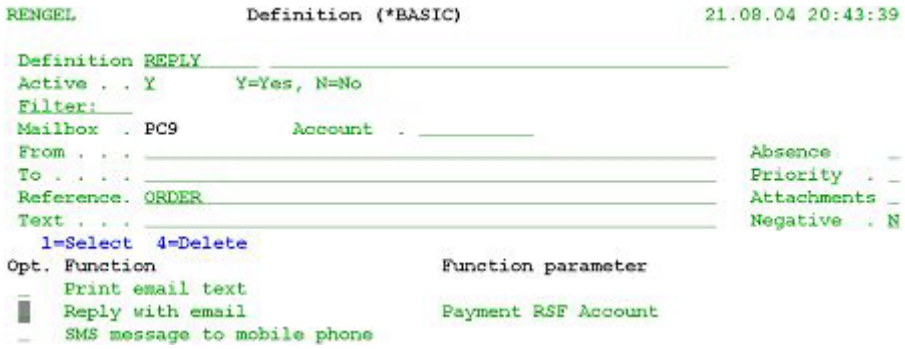


0184 - Enter mail ID

Mail ID

The reply is based on a saved email which is stored in a folder of your choice. Select the reply email with **F4**.

0185 - Select email



0186 - Reply to request with email test

11.1.14 Notification by GSM text

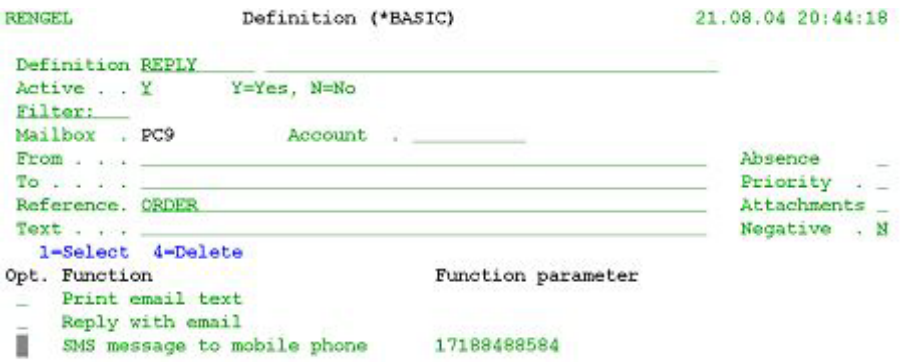
If you have installed GSM text from TOOLMAKER on your iSeries, you can inform anyone owning a mobile phone, about your incoming emails. The mobile phone owner is notified that an email has arrived and sent the subject. This is of particular benefit to people working out of the office or for mobile workers.

0187 - Email notification by text/SMS message

Enter your **filter criteria** and enter **1** next to “SMS message to mobile phone“.

0188 - Enter the mobile number

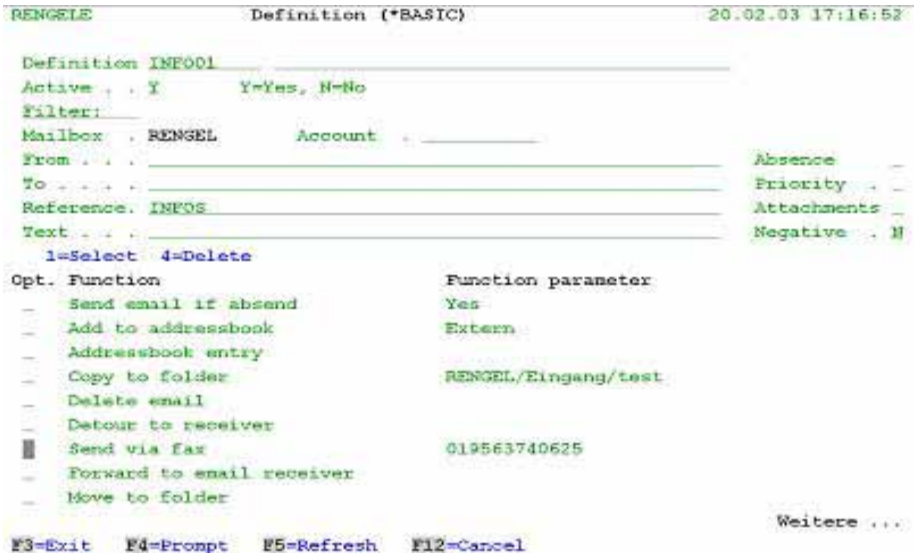
Enter the **mobile phone number** or select an entry from the address books using **F4**. ***OWNER** sends the email to the text/SMS number that is contained in the address entry for the receiving mailbox.



0189 - Notify a mobile phone user

11.1.15 Combinations

You can execute multiple functions in succession in simple mode by selecting multiple options. The actions taken are always based on the filter function.



0190 – A combination of functions

11.2 Expert mode

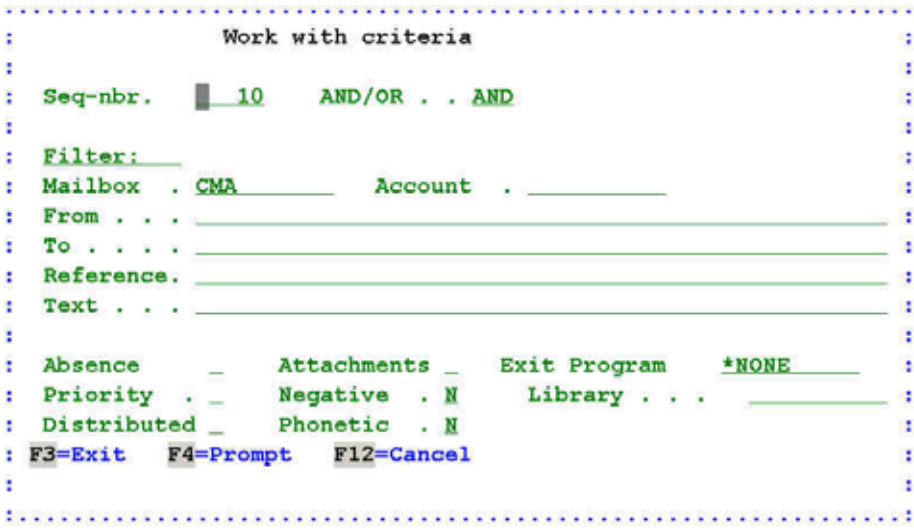
Expert mode offers greater flexibility in executing functions. So you can start actions repeatedly, define the order of the actions as well as combine **AND**" and "**OR**" operations.

0191 – Expert mode

Combination of functions in expert mode

11.2.1 Filter functions in expert mode

The filter function in expert mode corresponds essentially to the function in the Simple Mode, with the difference of having an additional Exit Program function available and an additional check for "already distributed".



0192 - Exit program

Sequence number
Enter the sequence number here for the sequence of checking the conditions.

AND/OR
Conditions can be linked using AND/OR.

Mailbox
The 10-character alphanumeric mailbox name with which this email has been received.

Account
Filter here incoming mails according to the mail account

From
Filter here according to the sender

To
Filter here according to the recipient

Subject
Filter here according to the subject of incoming mails

Text
Filter here according to character strings in the text of the email

Absence
Filter emails according to the entered absence time.

The values allowed are:

Y Filter emails only which have been received during the entered absence.

N Filter emails only which have not been received during the entered absence.

Empty Do not consider absence

Attachments
Filter here emails according to attachments

The values allowed are:

Y Filter emails with attachments only.

N Filter emails without attachments only.

Empty Do not consider attachments

Exit program/library
The Exit Program filter function allows, in addition to other filter functions, the activation of a user-defined program. This program is executed and must give back a return code. Depending on the return code, the filter is declared as correct or incorrect. The following parameters are required:

Priority
Filter here incoming mails according to priority

The values allowed are:

H Filter emails with priority High.

N Filter emails with priority Normal.

G Filter emails with priority Low.

Empty Do not consider priority

Negative
Enter here option „Y“ if you want to filter emails that do NOT correspond to the criteria

Distributed
Filter mails here according to distribution status

The values allowed are:

Y Filter mails only that have been distributed already

N Filter mails only that not yet have been distributed

Empty Do not consider distribution status

Phonetic
Filter here incoming mails according to phonetics

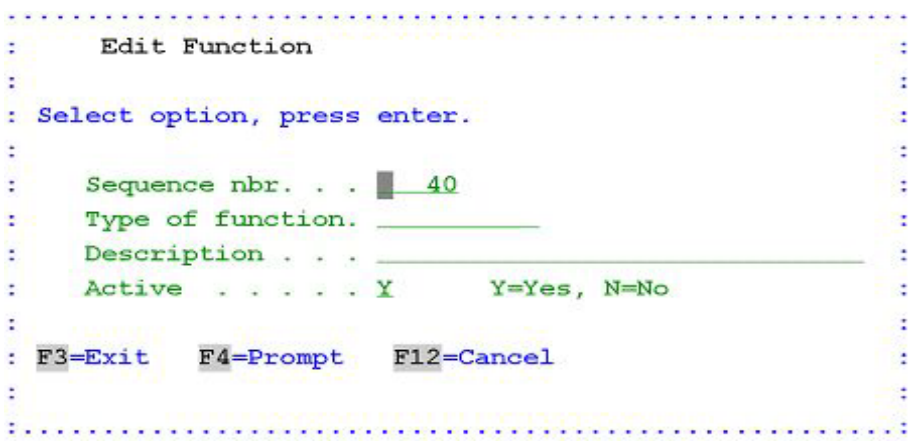
The values allowed are:

Y Filter emails according to phonetic search

N Do not filter emails according to phonetic search

11.2.2 Add functions in expert mode

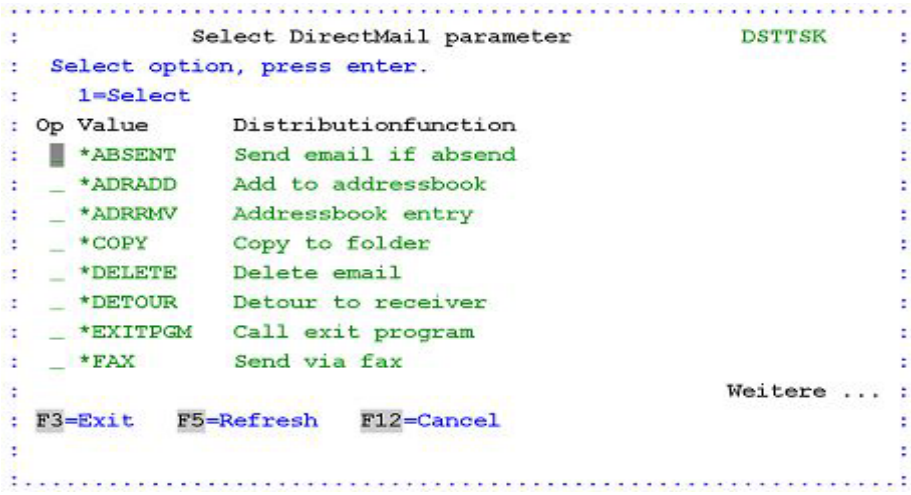
When editing functions in expert mode, you have to enter the type of function, description and activity code, analogous to simple mode.



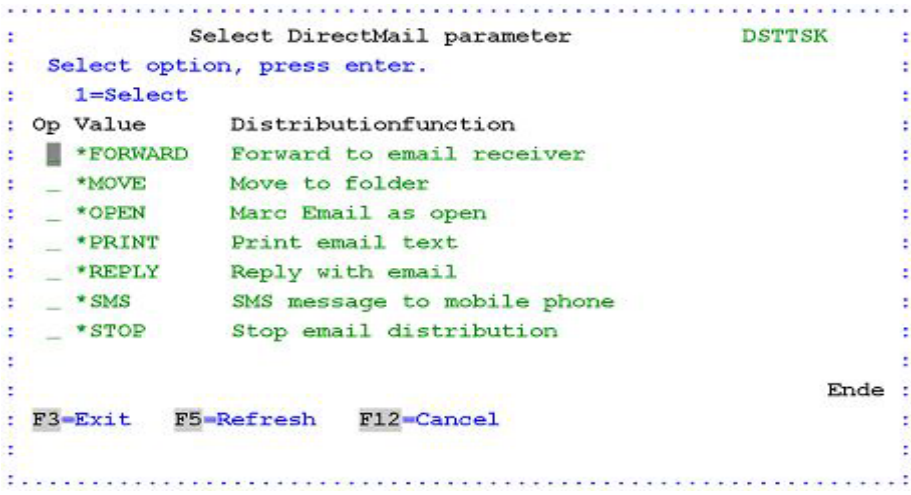
0193 - Edit function

Sequence number
Enter the sequence number for processing the commands here.

Function type
Press F4 to display a list of available functions.



0194 - Expert mode functions, page 1



0195 - Expert mode functions, page 2

Select the desired function with option **1**.

Description

You may enter a description of the function here. If you enter nothing here, the stored description from the available functions will be placed.

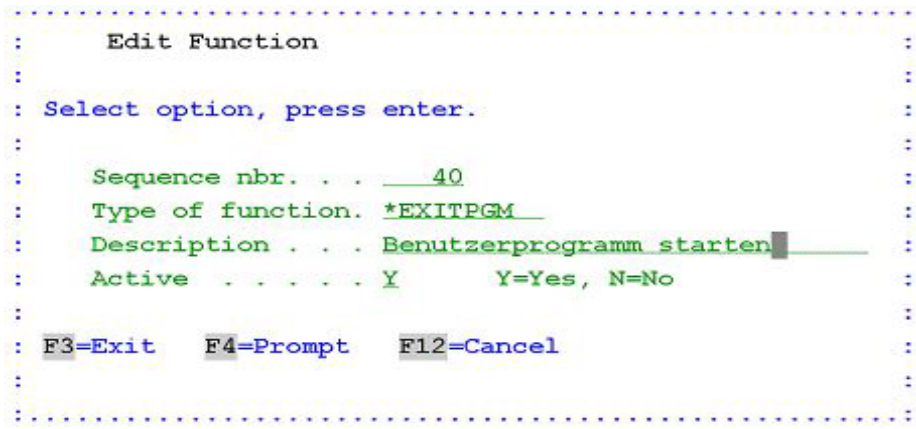
Active

Control here, whether the function shall be executed or whether the function shall be intermediately deactivated.

The values allowed are:

Y Function is active

N Function is not active.



0196 - Start user program function

Except for three the functions have already been described in the simple mode section.

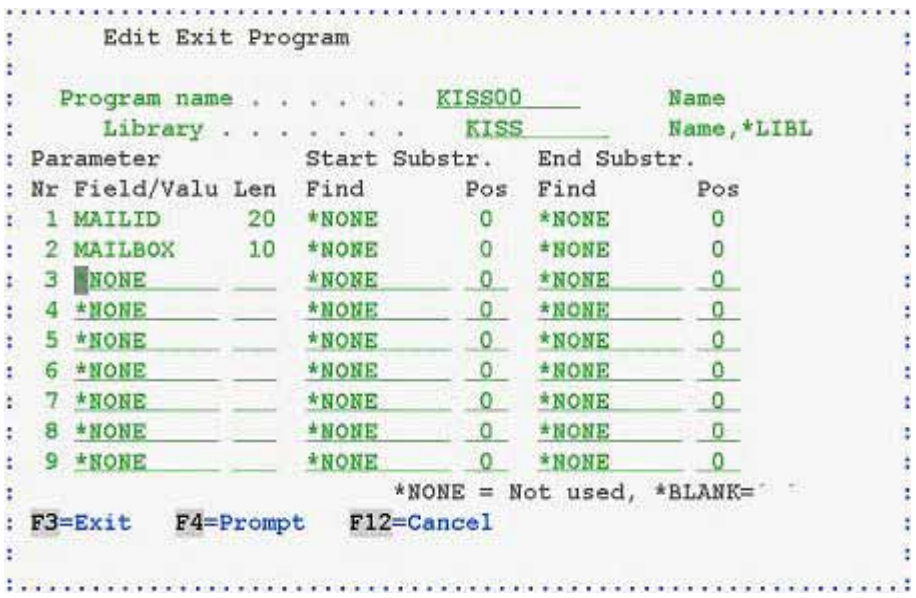
***EXITPGM**

The *EXITPGM function allows the activation of your user program depending on the filter functions set for incoming emails. With the *EXITPGM-function two constant parameters and further optional parameters are transferred to your Exit program:

MAIL ID A 20-character alphanumeric string contains the unique mail ID under which the email is filed in the IFS.

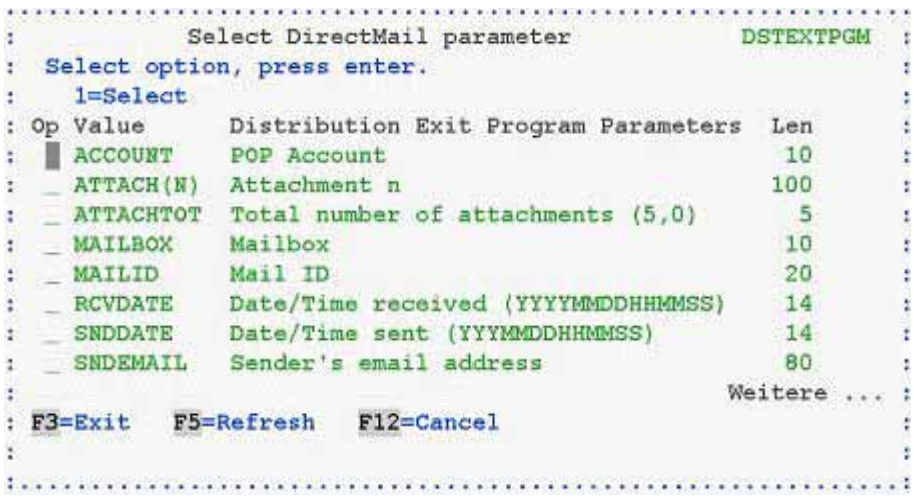
MAILBOX The 10-character alphanumeric mailbox name with which this email has been received.

Parameters 3-9 variable definable alphanumeric parameters.



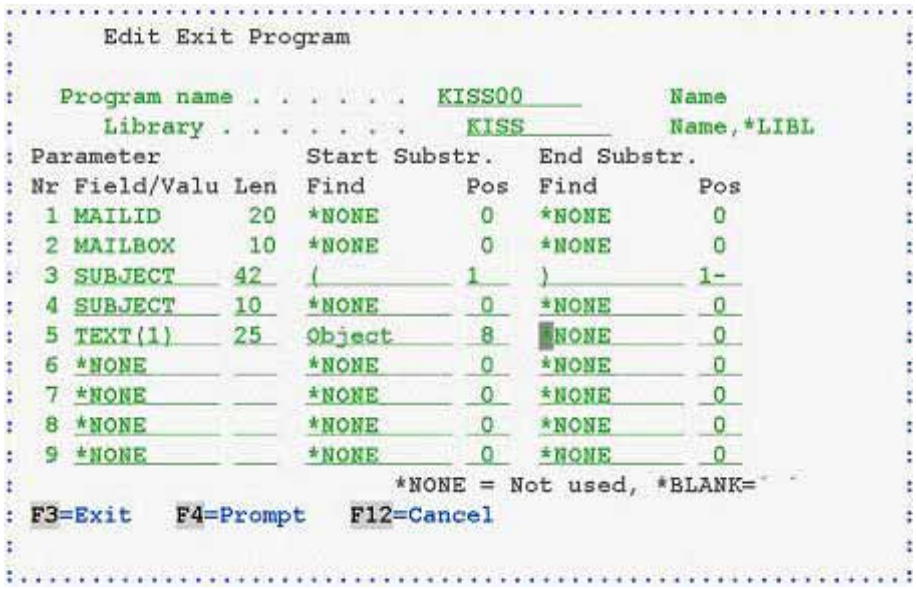
0197 – Edit exit program

The sources of the optional parameters can be selected from the available parameters using the F4 key.



0198 – Select parameter

Define variably the parameters really transferred to your program and their length as described in the example hereafter.



0199 – Parameter definition

Parameter3 in this case is a character string from the reference with 42 digits. The contents of the parameter is extracted from a string in brackets, beginning one digit behind the "("-character and ends one digit before the ")" character. With this e.g. the parameter with length 42 from the reference „Order with license key (23432-23123-12341)" can be transferred to your program using the character string „23432-23123-12341".

Parameter4 contains the first 10 digits from the reference

Parameter5 looks for the constant "Reference" in the first text line and then transfers the 25 characters behind that (8 digits behind the constant Reference).

With access to both of the following files, a programmer can read out the reference and the contents of the email text.

DMITMHDR Head file of the email incl. reference text

DMITMTXT Text lines of the email

The key for both emails is the 20-character MAIL ID

We have listed two samples of Exit Programs below:

Sample program for export of email attachments

```
*********************************************************************
*    Sample  Exit  Programm  for  exporting  email  attachments            *
*                                                                         *
*   (C)   2000   Toolmaker   Software                                     *
*********************************************************************
c         *entry            plist
c                     parm                    mailid             20
c                     parm                    mailbox            10
c
c                    do          9999           attid              5   0
 *        Cat    EXPEMLATT    command
c                     eval         clcmd='DIRMAIL/EXPEMLATT    MAILID('+
c                                  %trim(mailid)+')     ATTID('+
c                                  %trim(%editc(attid:'Z'))     +
c                                  ')     PATH(''/dirmail/file.'+
c                                %trim(%editc(attid:'Z'))   +   ''')   '   +
c                                      'REPLACE(*YES)'
c
 *        Execute    EXPEMLATT    command
c                     call       'QCMDEXC'                              50
c                     parm                     clcmd           1000
c                    parm       1000          cllen            15  5
 *      If error occured, assume, that all attachments have been exported
c                      if          *in50
c                        leave
c                        endif
c
c                        enddo
 *        Quit   program
c                     seton                                        lr
```

Sample program for output of mail text to a source file

The Program receives the internal Mail-ID as Parameter and chains the Mail-Header file and the Mail-Text file. The records will be written in the source file EMLOUTF in library QGPL. It makes no sense to write the data in library QTEMP, because the Program is running in batch mode.

Adjustments in Incoming Mail Assistant:

Function	Description	Parameter	Active
*EXITPGM	Demo EXIT-Program	CALL(EMLEXIT1)	Yes

```
H*********************************************************************
H*                                                                   *
H*  Demoprogramm DirectMail Ausgabe Mailtext in Quellendatei         *
H*  erstellt 30.04.03/HW                                            *
H*                                                                   *
H*  Voraussetzungen f r die Ausf hrungsphase:                       *
H*  1. Bibl. DIRMAIL muss in *LIBL vorhanden sein                    *
H*  2. Datei EMLOUTF in QGPL ist keine Datendatei des Anwenders!     *
H*                                                                   *
F*********************************************************************
F* Mail Kopfdatei                                                   *
Fdmitmhdr  if   e           k disk    usropn
F* Mail Textdatei                                                  *
Fdmitmtxt  if   e           k disk    usropn
F* Demo Ausgabedatei f r Mailtext                                  *
Femloutf   o    f   92        disk    usropn
D*********************************************************************
D* Satzdefinition f r Quellendatei (Datenstruktur)
Dsrcrec           DS
D srcseq                 1      6S 2
D srcdat                 7     12S 0
D srcdta                13     92
c*********************************************************************
c* Eingangsparameter von Funktion *EXITPGM (PE/Posteingangsassistent)
c     *entry        plist
c                   parm                    MailId          20
c                   parm                    MailBox         10
c*
c* Demo Zugriff auf Mail Kopfdatei
c     mailid        chain     itmhdrf                         50
c*
c* Lesen aller Texts„tze der Mail und Ausgabe in Demodatei
c     mailid        setll     itmtxtf
c                   do        *hival
c     mailid        reade(n)  itmtxtf                           5050
c   50              leave
c                   movel     txdta         srcdta
c                   write     emloutf       srcrec
c                   enddo
c*
c* Programmende
c                   move      *on           *inlr
c*
c*****************************************************************
c*  Programmstartroutine
c*
c     *inzsr        BEGSR
c*
c*  Demodatei EMLOUTF in QGPL l”schen/erstellen
c                   eval      clcmd     c           'CLRPFM FILE(QGPL/EMLOUTF)'
c                   exsr      runcl
c                   if        *in50
c                  eval      clcmd     c       'CRTSRCPF FILE(QGPL/EMLOUTF) ' +
c                             'RCDLEN(92) MBR(*FILE)'
c                   exsr      runcl
c                   endif
c*
c                   eval      clcmd     c       'OVRDBF FILE(EMLOUTF) '+
c                             'TOFILE(QGPL/EMLOUTF)'
c                   exsr      runcl
c*
c* Alle Dateien ”ffnen
c                   open      emloutf
c                   open      dmitmhdr
c                   open      dmitmtxt
c*
c                   ENDSR
c*****************************************************************
c*  Execute System Command
c*
c     RunCl         BEGSR
c                   CALL      'QCMDEXC'                         50
```

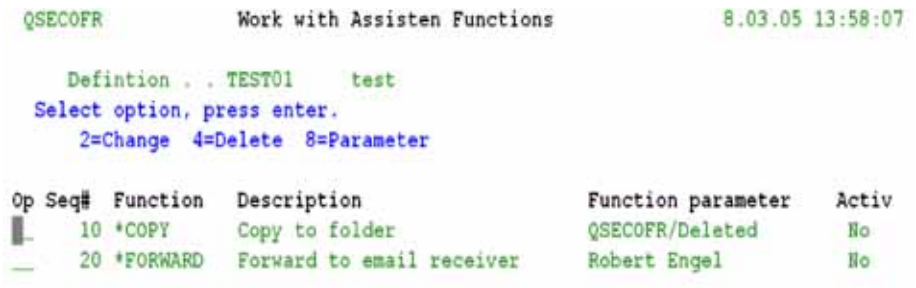
```
c                   PARM                    ClCmd          256
c                   PARM      256           CmdLen          15 5
c*
c                   ENDSR
c*****************************************************************
```

***OPEN**

The function *OPEN is only available in expert mode and marks an incoming email corresponding to the filter criteria as opened.

***STOP**

Stops the email distribution with these functions.



0201 - Combinations of functions in expert mode

12.0 AutoMail

Many users already use DirectFax/400, the user-friendly fax system for iSeries from Toolmaker. What is already a standard in DirectFax/400, is now with AutoMail also available to the users of DirectMail/400.

Spool files are read out without special programming, purely through parameter inputs in the configuration program, from output queues and are automatically sent by email, converted or archived.

Note:
As the function AutoMail works with spoolfiles, the DirectMail user profile (DIRMAIL) must have the special authority *SPLCTL.

12.1 AutoMail configuration

DirectMail provides an extensive program for the configuration of the AutoMail functions, which can be started by means of option **6** from the DirectMail main menu or via the command **WRKATMDEF**.

0202 – The AutoMail configuration program

Options

2=Change
Use this option to edit existing definitions, to change parameters, etc.

3=Copy
Use this option to copy an existing definition to a new definition.

4=Delete
Use this option to delete an AutoMail definition.

8=Description
Use this option to change the definition description.

9=DirectView
This option allows you to change the conversion settings required for DirectView.

10=Bundles
Displays the created spoolfile bundles and allows you to display the files in a bundle.

12=Reset hits
Use this option to reset the number of hits per AutoMail definition to zero.

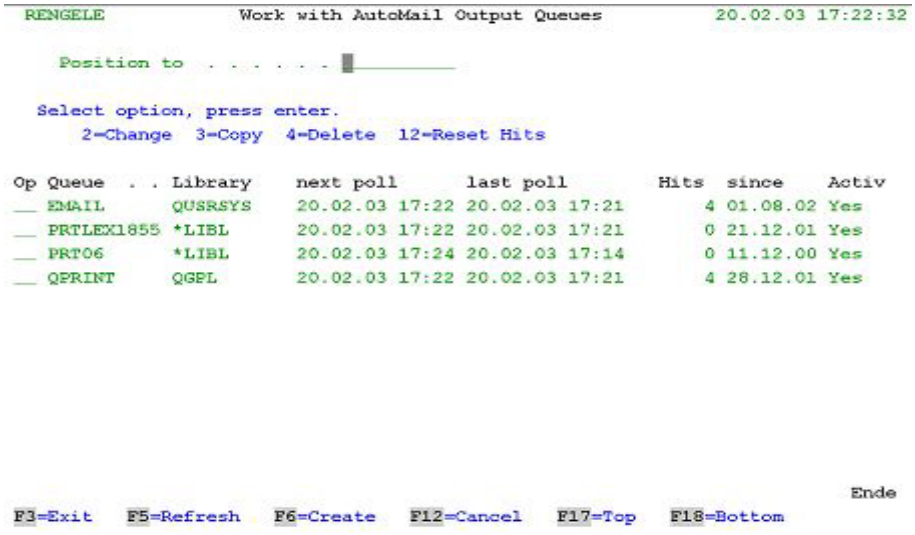
Function keys

F11=View
Filter settings for the AutoMail definition are shown in the second view.

F22=Queues
Define the output queues to be monitored. You will find more information on these functions in the chapter "Outqueues**Fehler! Es wurde kein Textmarkenname vergeben.**".

12.2 Outqueues

With AutoMail you can not only monitor output queues defined by us, but also dynamically define your own output queues, which are to be regularly checked for new contents to be sent.



0203 - Work with output queue

Options

2=Change
Use this option to change defined queues.

3=Copy
Use this option to copy an existing definition to a new definition.

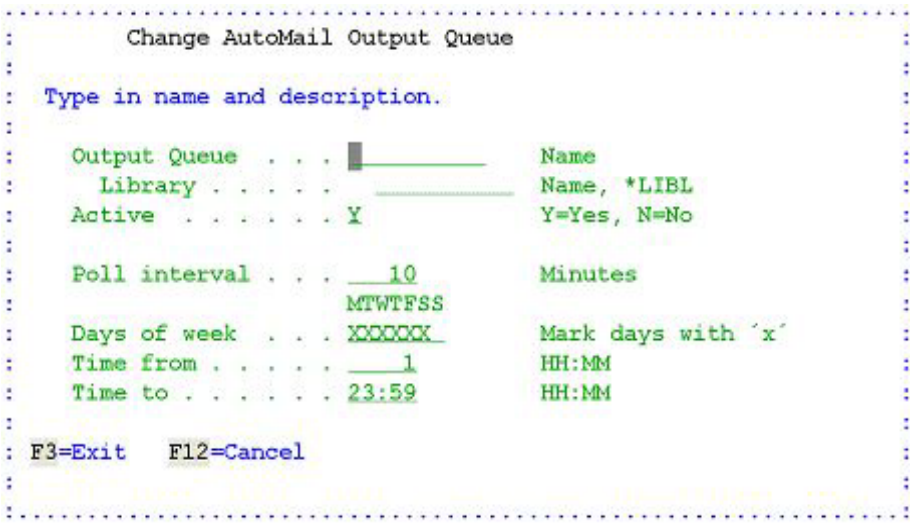
4=Delete

Use this option to delete a queue definition.

12=Reset hits
Use this option to reset the number of hits per queue to zero.

12.2.1 Create outqueues

With the function key **F6** you can define, from within the screen “Work with AutoMail queues“, a new queue which should be monitored by AutoMail.



0204 - Create new AutoMail queue

Outqueue
Enter the name of the queue to be monitored. The existing output queues in the system can be displayed and selected with **F4**.

Library
Enter the library in which the queue is saved. Alternatively you can also specify the value *LIBL (use of the library list).

Active
Specify whether the queue is active and being monitored.

The values allowed are:

Y The queue is monitored

N The queue is not monitored

Use DataQ
Specifies whether or not the DataQ is used.

The values allowed are:

Y The queue is monitored

N The queue is not monitored

Poll interval

DirectMail is able to check the queues, in defaulted intervals, for new entries to be sent. Specify the time intervals in which this should occur.

The values allowed are:

Minutes Any desired value; the queue is checked every x minutes for new entries.

Days of week

Mark here on which day of the week the check should be carried out. By doing this you can, e.g., exclude checks at the weekend saving connection costs.

The values allowed are:

X Mark every day (every place corresponds to a day from Monday to Friday) on which the queue should be checked.

Time from - to

Specify here, within which time window the check should take place in the defined interval. This prevents your queues from being unnecessarily checked, e.g., during the night.

The values allowed are:

0:00 - 24:00

12.3 Create AutoMail definition

With function key **F6** you create a new AutoMail definition and the following screen is shown:

0205 – Create AutoMail definition

Definition

Enter an unique name for the definition. You should use a descriptive name (e.g. ABE01 for acknowledgements of orders, RECH01 for invoices, etc.), as the list of the AutoMail definitions is sorted by this name.

Description

This is the text description of the definition.

0206 – Definition screen

The necessary configuration specifications for the automatic processing of the spoolfiles with AutoMail are is entered through this definition screen.

Function keys

F10=Menu

Many functions in AutoMail are called via the integrated pull-down menu. Press F10 to go to the menu bar. In the menu bar you can navigate with the tab key as well as the cursor keys and select the menu items with the Enter key.

F13=CSV tab

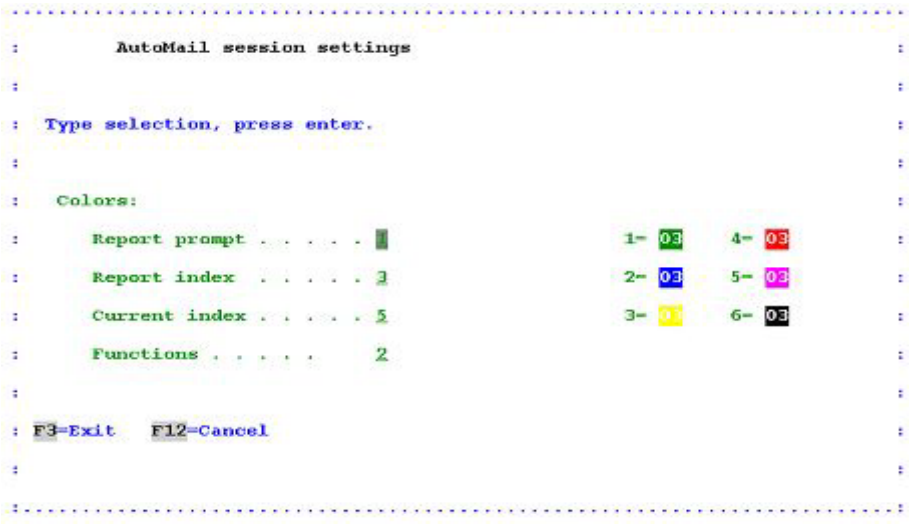
When the spool data output is in CSV format, you can position the cursor in the spool data area and add a column separation with this function key. The separation of the column always occurs behind the defined position.

F22=Queues

With F22 you skip to the output definition queues, which should be monitored with AutoMail, which is described above.

12.3.1 Session definitions

Some definitions are reflected in the contents of the spoolfiles displayed. To enable a visual difference, you can configure the colour settings via the menu item ”Session settings“ which you reach pressing **F10**, option “**File**“ and “**Session settings**“.



0207 - Session definitions

Report prompt
Colour selection for report prompt.

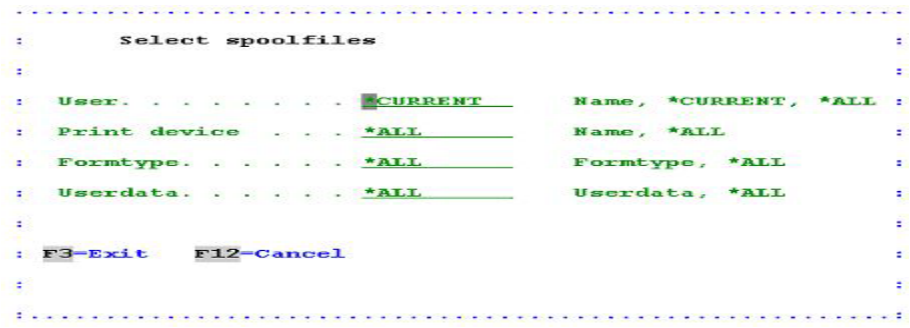
Report index
Colour selection for report index.

Current index
Colour selection for current index.

Functions
Colour selection for functions.

12.3.2 Open spoolfiles

From the definition screen, press **F10** to skip to the menu bar. Select the menu item “**File**“ with the Enter key and then the menu option "**Open spool**".



0208 - Select spoolfiles

User
User creating the spoolfile.

Print device
Print device where the spool shall be printed.

Form type
Form type of the spoolfile.

User data
User data of the spoolfile.

Filter the spoolfiles to be displayed by entering the parameter values. With this, you limit spoolfiles displayed on the following screen and consequently facilitate the selection of the required spoolfile.

```
20.02.03  17:25:50      Select Spooled File                      RENGELE

Select option, press enter
   1=Select    2=Change    3=Hold       4=Delete
   5=Display   6=Release   7=Messages   8=Attributes ...

                           Device/                          Gsmt.   Act.
Opt  File        User      Queue      User-data    Stat     Page    Page  Copy
 1   QPJOBLOG    RENGELE   PRT01       QPADEV0007  RDY        36            1
 _   QSYSPRT     RENGELE   PRT01                   RDY         1            1
 _   QSYSPRT     RENGELE   PRT01                   RDY         1            1
 _   QSYSPRT     RENGELE   PRT01                   RDY         1            1
 _   QSYSPRT     RENGELE   PRT01                   RDY         1            1
 _   QSYSPRT     RENGELE   PRT01                   RDY         1            1
 _   QSYSPRT     RENGELE   PRT01                   RDY         1            1
 _   QSYSPRT     RENGELE   PRT01                   RDY         1            1
 _   QSYSPRT     RENGELE   PRT01                   RDY         1            1
 _   QSYSPRT     RENGELE   PRT01                   RDY         1            1
 _   QSYSPRT     RENGELE   PRT01                   RDY         1            1
 _   QSYSPRT     RENGELE   PRT01                   RDY         1            1
 _   QSYSPRT     RENGELE   PRT01                   RDY         1            1
                                                                        More...
F3=Exit      F4=Prompt   F5=Refresh   F10=View 3   F11=View 2
F12=Cancel   F17=Top     F18=Bottom   F22=Printer  F23=More options
```

0209 – Select spoolfile

Now select the spoolfile to be processed entering option 1.

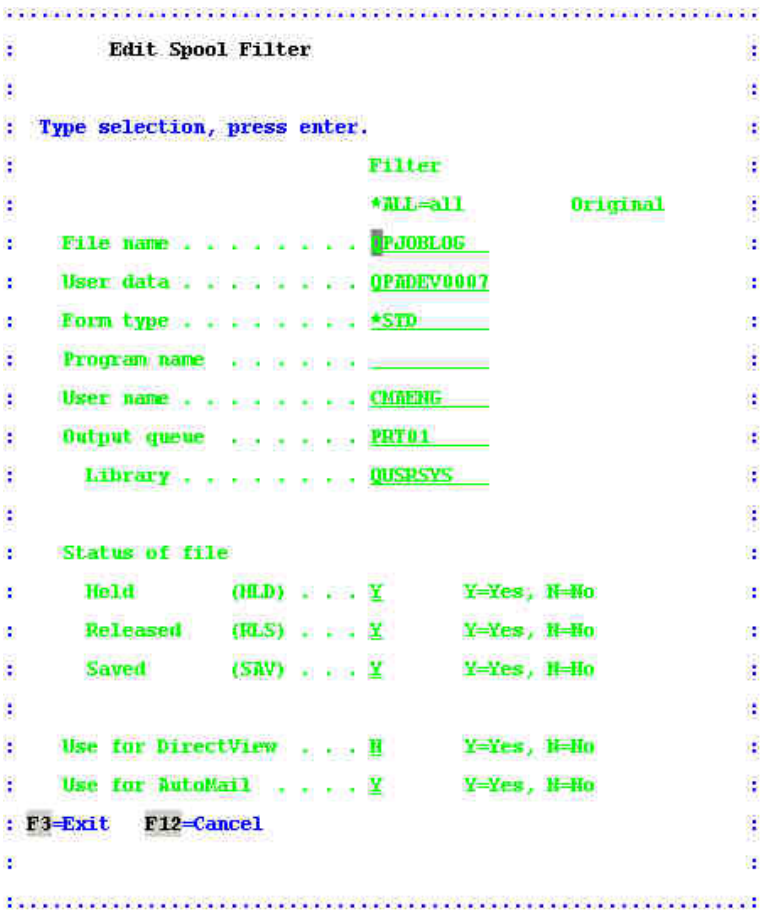
0303 – Adapt spool filter

Response
Entry for filter adaptation.

The values allowed are:

Y= Filter will be adapted automatically.

N= Filter will not be adapted automatically.



0210 - Spool filter

Filter
In the spool filter you can add or eliminate further restrictions. In our example you could extend the definition to all users by entering *ALL next to “User“, which put this spoolfile into the output queue PRT01.

File name
Entry of file name for spool filter.

User data
Entry of user information for spool filter.

Form type
Entry of form type for spool filter.

Programme name
Entry of program name for spool filter.

User
Entry of user for spool filter.

Outqueue/Library
Enter the outqueue and library here.

Status of file
With the status fields you define at which status the spoolfile is processed. With this it can be excluded that a spoolfile with status HOLD in the outqueue is sent automatically. This spoolfile must then be first released from the divisional manager, for example, before it is processed.

Held
Also spoolfiles set to hold can be processed (status HLD)

Released
Also released spoolfiles can be processed (status RLS)

Saved
Also saved spoolfiles can be processed (status SAV)

Use in DirectView .
Use in AutoMail .

Specifies whether the AutoMail definition is used for DirectView or AutoMail.

The spoolfile filter can be displayed or changed, at the same time, through **F10**, option “**File**“ and "**Spool filter**".

0211 – Spool file content display

The content of the selected spoolfile is shown in the working area.

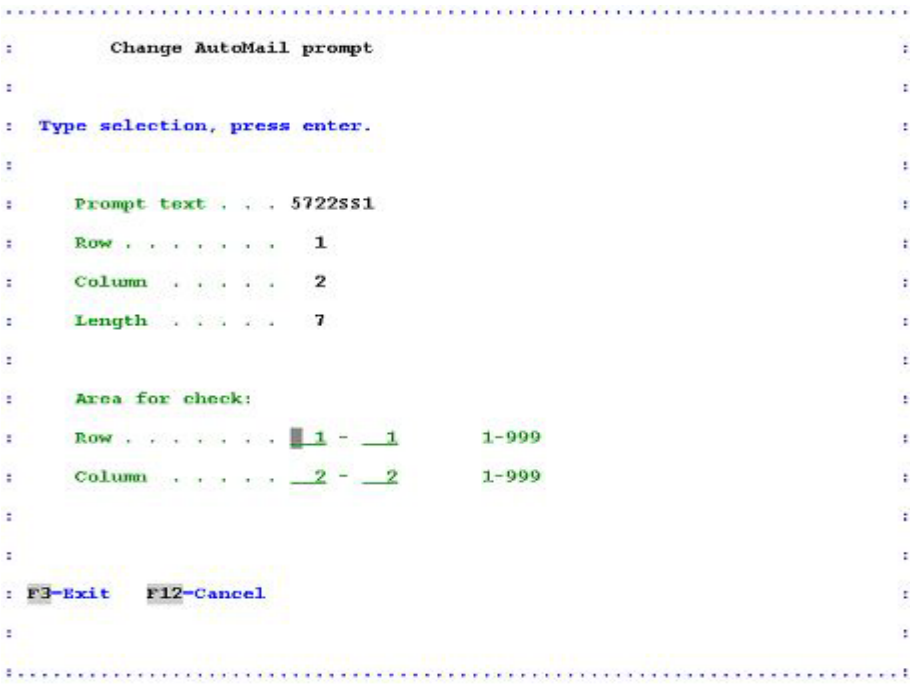
12.3.3 Spool prompts

Spool files cannot only be selected or filtered out with AutoMail on the basis of external codes like spoolfile names, user, form, user data, output queue, etc., but also on the basis of the contents in the spoolfile itself.

This function allows, e.g., to distinguish documents, which always look similar from the outside and have a similar spoolfile name, on the basis of their contents. The contents could, e.g., be constants like "invoice", "quote", etc., which are not only in fixed but also in variable places in the document.

Create a spool prompt through **F10**, option "**File**" and "**Spool prompt**".

Define the beginning and end of the constant with the cursor and enter keys.



0212 – Edit AutoMail prompt

Page area for check

As long as the searched constant does not stay in a fixed place in the spoolfile (in our example, row 15, column 10) but somewhere in the text, then the page area can be enlarged to include rows as well as column levels.

Defined spool prompts are shown underlined.

12.4 Indexes

In order to extract data from the iSeries databases by means of contents from the spoolfile and without programming, these spool contents are copied into index fields with which you then have access to the databases.

Inversely, the field contents from the databases are copied into the index fields, which can then be used when processing with AutoMail.

For example, a customer number can be copied from the spool into an index field SPLKDNR. This field is used to access the customer master file and an index field DBEMAIL is copied from the email address field of the customer master file. This DBEMAIL field is then used as an email address for sending the email.

If there is no index defined, the default index SPLUDD = User defined data for spoolfile is used.

12.4.1 Create Index

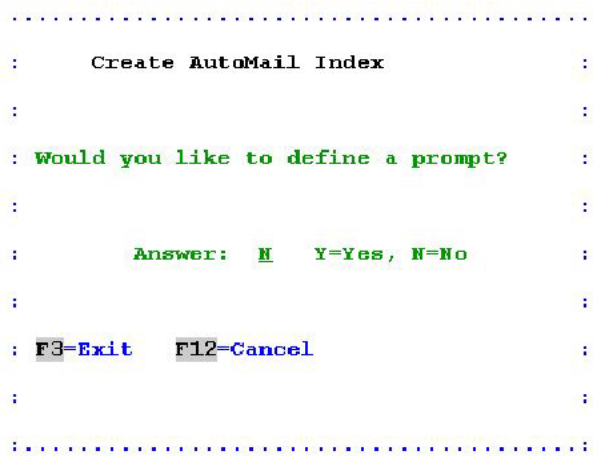
Indexes are created through `F10` as well as option "`Index`" and "`Define index`".

Mark the **start and end positions** of the index field analogous to the marking of the spool prompt, described above. Put the **cursor position to the start position**, press the **enter key** and put the **cursor to the end position**, once again press the enter key.

Alternatively a prompt can be defined for an index field. A constant at a certain position in the text defines the prompt. For example, a customer number can be extracted, but only if the constant "customer no." is stated before the customer number.

12.4.1.1 Define prompt

If the information from the spoolfile is not at a fixed, defined position within the spoolfile, you have to define a prompt. A prompt is a constant that is directly correlated to the information, which you want to extract from the spool (e.g. customer number in front of the which there is the string "customer no."). You can set a prompt next to each piece of information that you extract from the spoolfile.



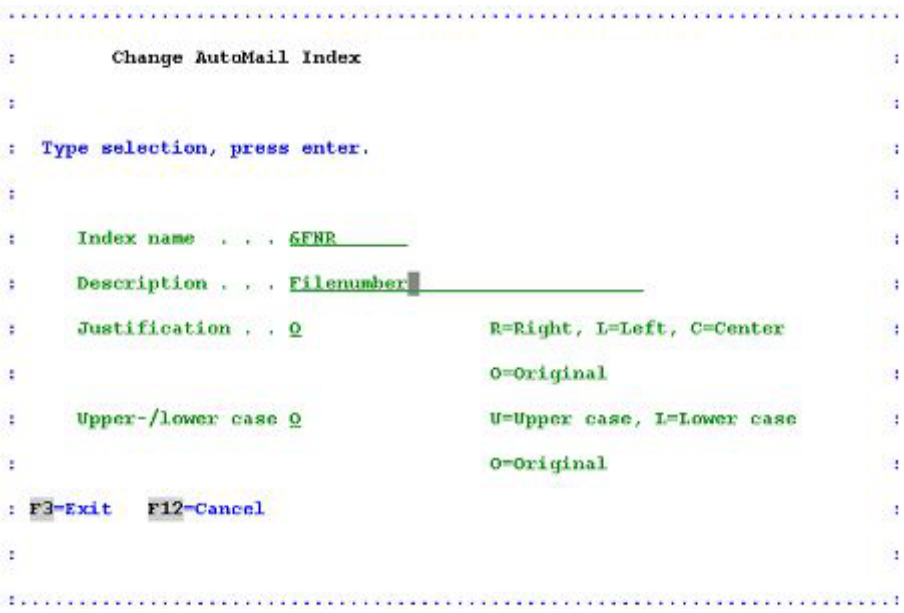
0213 – Define a prompt

Response

Enter Y if you want to create a prompt and press the enter key. Then mark the prompt start position, press the enter key, mark the end position and press the enter key once again.

12.4.1.2 Define index

After setting the index field and any prompt the index to be processed will be displayed:



0214 - Edit index

Index name

Here a unique name is assigned to every index. This name is later, e.g., used to access a iSeries database. (Here: SPLKDNR for access to customer master file.)

Description

Enter a text description for the index.

Adjustment

You can specify here how the data should be justified in the index. If for example the index field is set to 10 characters, as this may map the maximum occurring length, you can define for an actual content of 5 characters how these places are adjusted.

The values allowed are:

R = Right The text content is justified to the right of the index field

L = Left The index content is justified to the left of the index field

C = Center The index content is centred in the index field

O = Original The index content is copied as it is in the spool

Capitalization

You can specify here whether the letters are to be converted in the index fields.

The values allowed are:

U = Upper case letters The content is **converted** into upper case letters

L = Lower case letters The content is converted into lower case letters

O = Original The content is copied as it is in the spool

As many index fields can be collected from the spool as desired.

Multi occurrence

Here you define whether the index is searched only once or multiple times per page. With this e.g. technical drawings of the articles can be added to order lines.

The values allowed are:

Y = Yes The index is checked for multiple occurrences.

N = No The index is overtaken at the first occurrence, the search terminates.

12.4.1.3 Page range for check

If your prompt for the definition of the customer number position in the spool is not constant, you can define, alternatively to the fixed position to be searched after the prompt, a page area within which the constant is searched (in our example the customer no.). Depending on the position of the constants the customer number will be extracted correctly from the spool.

0215 - Prompt – Spool area for checking

Row/Column

Here you can define an area within which the spool prompt (the constant) is searched.

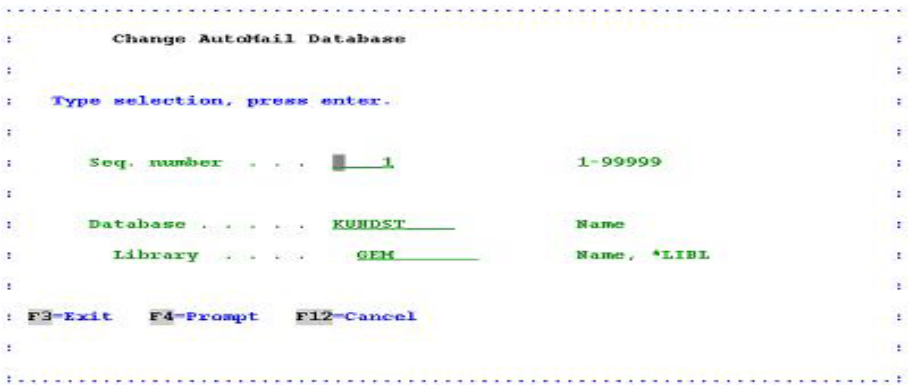
12.4.2 Database index fields

In order to access the contents of the databases, e.g. to retrieve the email address from a customer master file via the customer number, the

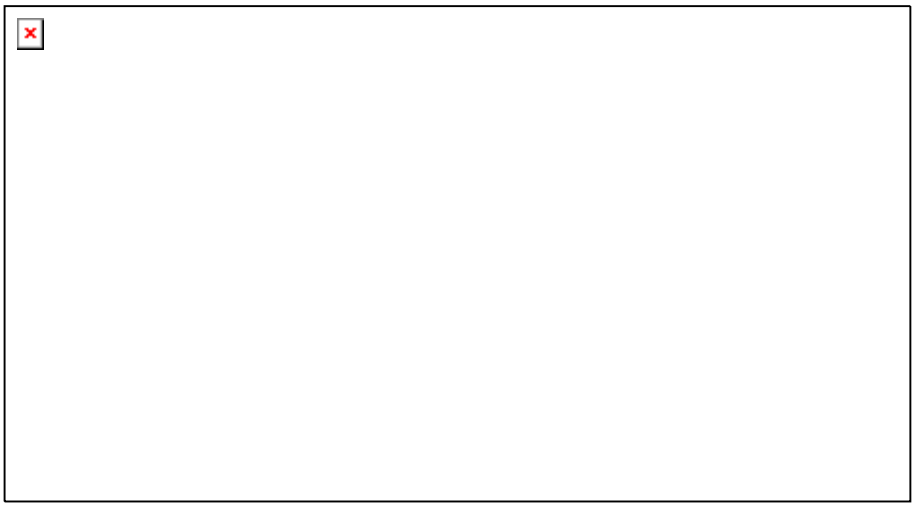
respective databases, the access to these database files and the corresponding fields must first be defined. This occurs through the function “Database index fields”. You can call this function through **F10**, option "**Index**" and "**Data base index fields**".

0216 - AutoMail databases

First we create a database definition for the customer master file with **F6**:



0217 - Change database



0324 – Add AutoMail database

Sequence number
Create an unique sequence number for the database to be added.

Database/library
Enter the database that you want to define in AutoMail. After entering the name of a library, you get, with the function key **F4**, a list of available database files of this library in the screen "Select object" and you can also adopt this with option 1.

Codepage
Specification of the codepage to be used.

Next the key fields of the selected file are displayed, which you have to link with index fields previously defined or with constants entered previously.

0218 – Database key field

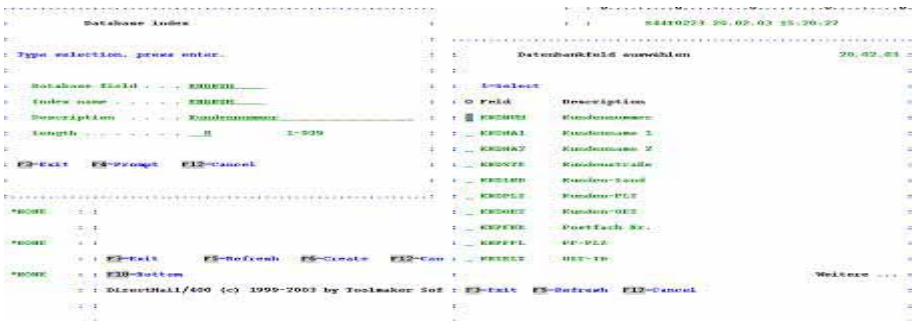
K_ey field
Enter either a constant (e.g. 01 for mandate number in case of customer master files with mandate number/customer number key). More frequently a key field and an index, which is extracted from a spool, are linked. You can easily adopt this index using function key **F4** and option **1** from the defined indexes.

Once the key fields are assigned the next step is for the index fields from the database to be defined, which you require when sending the spoolfile (e.g. email address, company name, etc.)

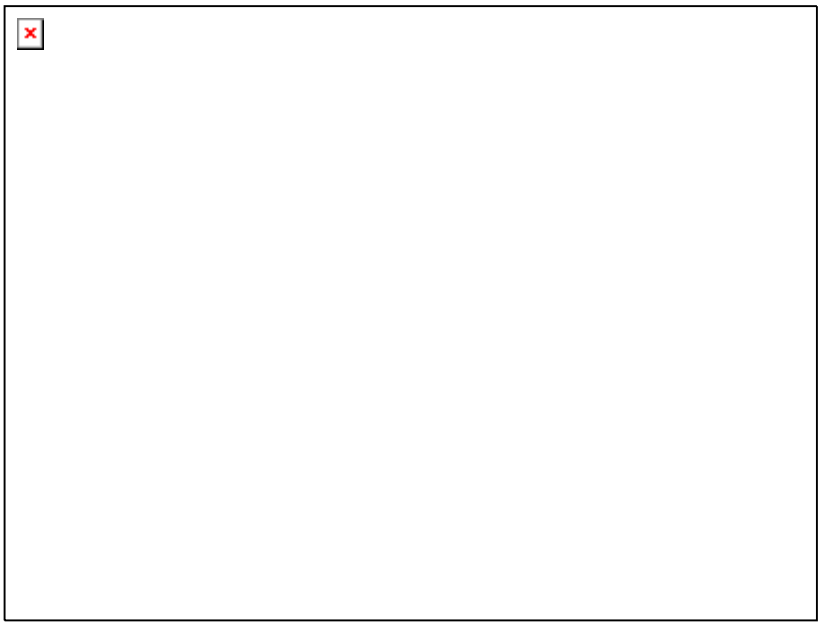
```
                Work with AutoMail Index
     TEST11

Select option, press enter.
    2=Change    4=Delete    5=Display

Op  Index       Description                    Type
    KNDNUM      Kundennummer                   *DBINDEX

                                                                      Ende
F3=Exit       F5=Refresh    F6=Create    F12=Cancel    F17=Top
F18=Bottom
DirectMail/400 (c) 1999-2003 by Toolmaker Software GmbH, .
```

0219 - Index from databases

New index fields are defined from the contents of the database with function key **F6**.



0220 - Define database index



0339 – Specify database index

Database field
This is the field from the database. These fields can be displayed with function key **F4** and selected with option **1**.

Index name
By default, the index name is identical to the database field, but it can also be individually named, with the index names being unique.

Description
The text description of the index field is the DDS field description when copied from a database.

Length
An index field can be limited in length so that only part of the field content is selected. When copying from a database, the associated field length will be used.

Group index
This parameter is only required when an index shall be inserted into a HTML file or into another file with hierarchical organisation (see additional attachments in HTML format). In this case a superior index will be assigned to each index.

Example of a list.

Open accounts

Customer 4711 Miller corp.

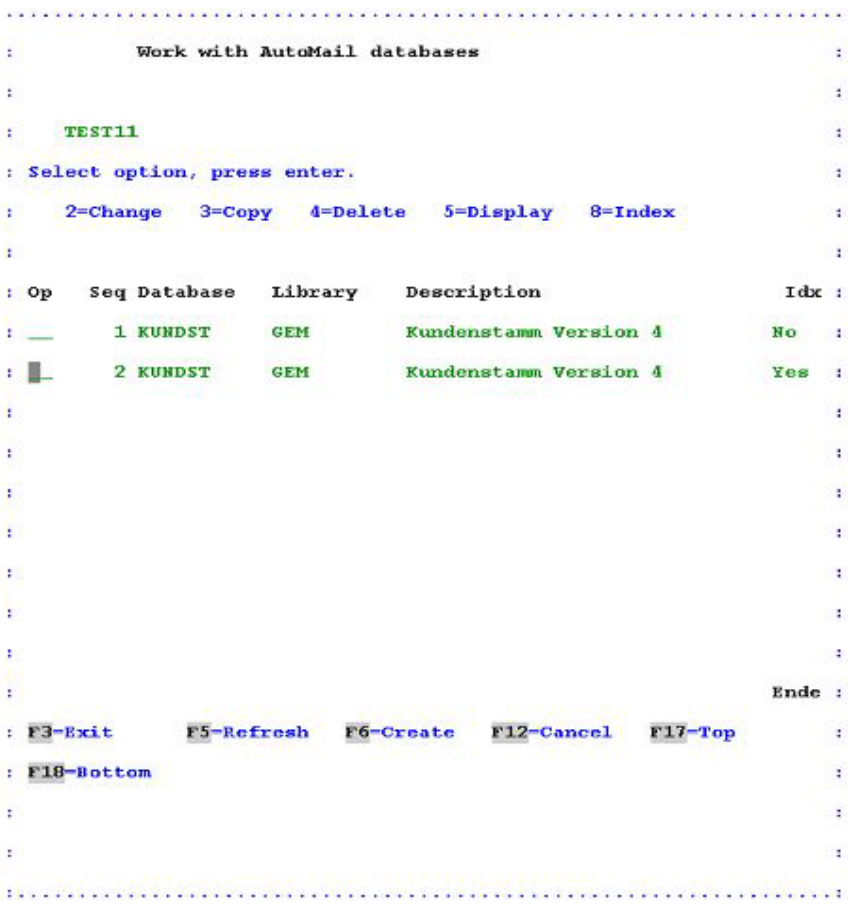
Inv.-no	Date	Amount
0815	01.02.2006	735,40
0816	02.02.2006	21,40
	Total:	756,80

This list could contain the following indexes.

Index	Group index
Customer	<empty>
Inv.-no	Customer
Date	Inv.-no
Amount	Inv.-no
Total	Customer

0221 – Work with AutoMail index

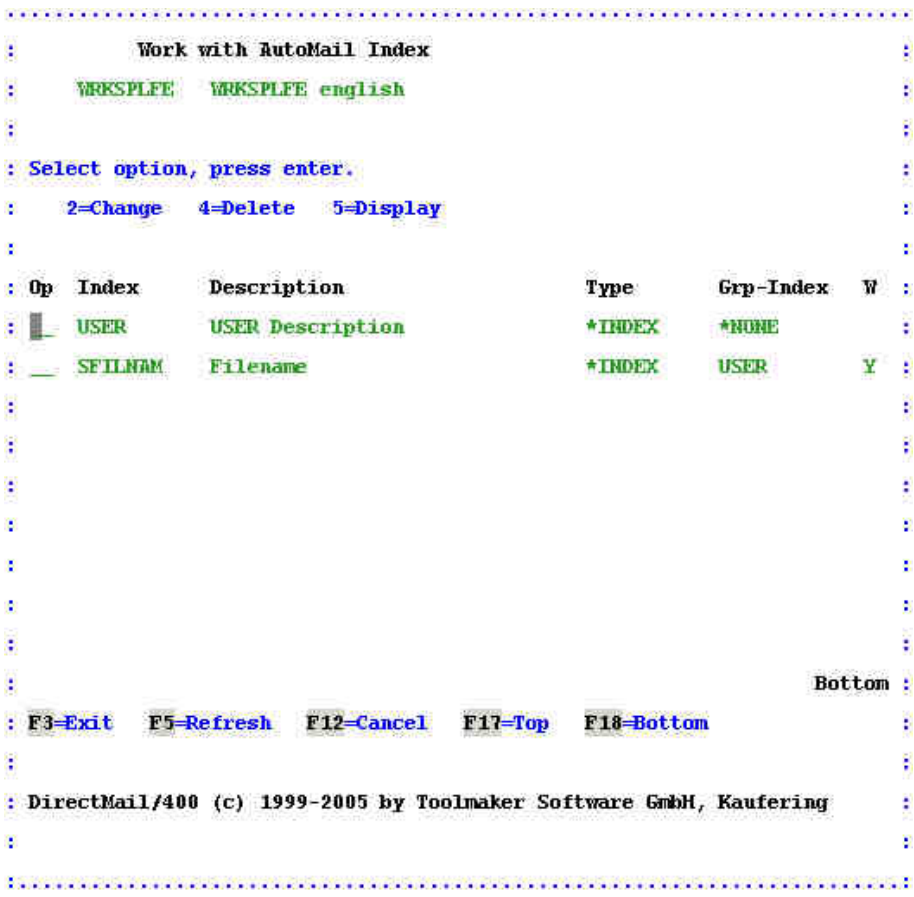
Using this function you can copy as many field contents from the iSeries databases as desired into index fields from AutoMail.



0222 - Created database definition

With option **2** you can revise the database definition and, e.g., change the key field information.

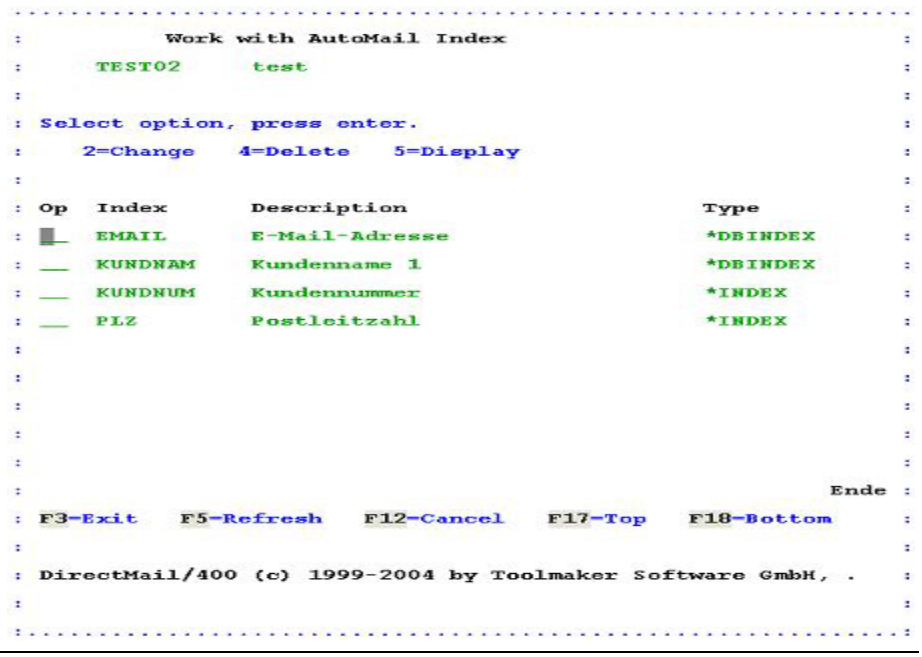
With option **8** you can process the index fields which you have defined in the previous step from your database. The fields already defined will be displayed.



0223 – Work with AutoMail index

12.4.3 Work with indexes

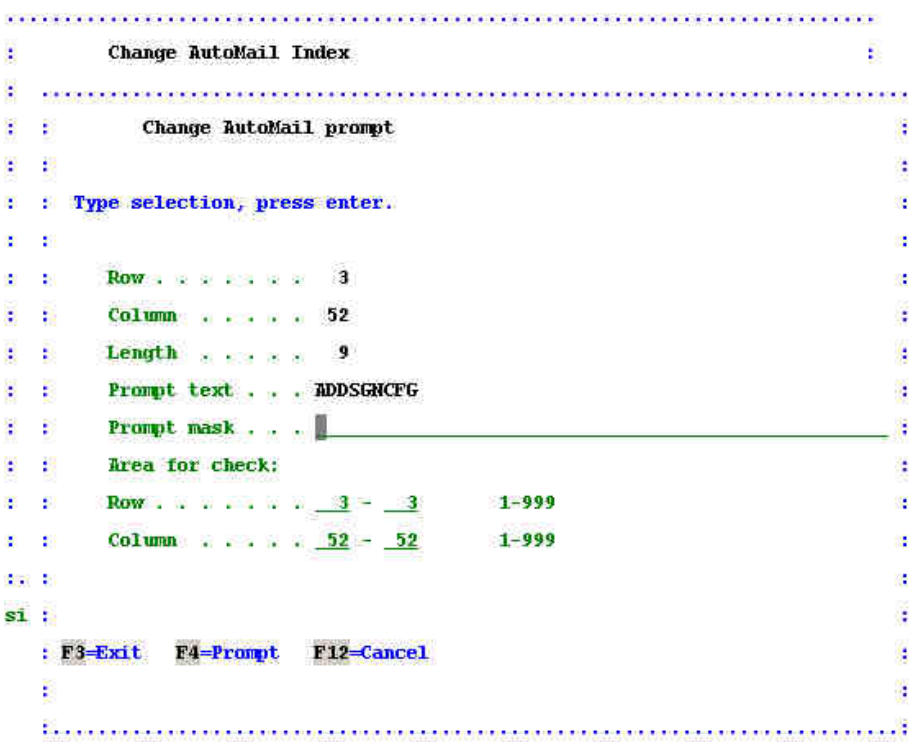
With the function “Work with Indexes“, which you call using **F10** as well as "**Indexes**" and "**Work with indexes**", the created indexes can be displayed or deleted at any time. This way you not only see the indexes that you created in the database definition area, but all existing indexes.



0224 - Work with indexes

Depending on the type of index field, *DBINDEX from databases, *INDEX from spooldata, or *RPTTYP from report definition, you will see different information by using option **5**.

For AutoMail index prompts, you can also specify a prompt mask.



0312 – Edit AutoMail prompt

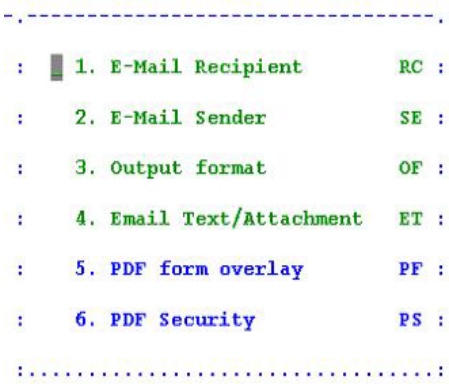
Placeholders can be used for some characters:

& Space character
$ Alpha character
? Any character
Numeric character
§ Not blank

For example, for the date prompt "1.12.05" you would use "?#.##.##".

12.5 Email parameters

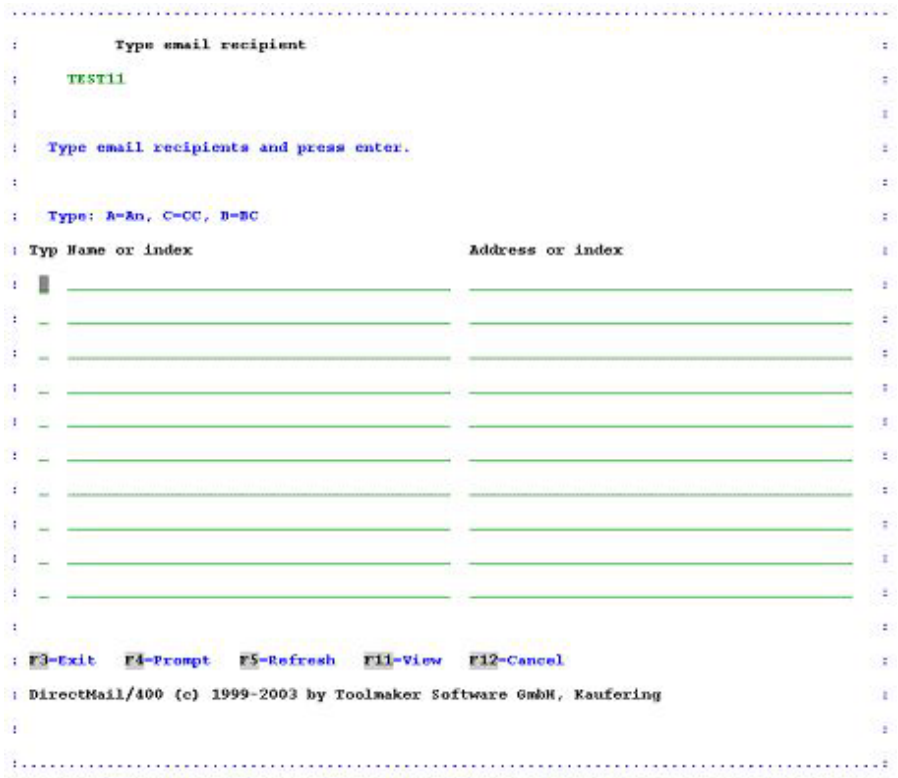
In order to send the spoolfile to the correct recipient, the defined index fields must still be integrated into the sending process. This is done with the function “email” that you call through **F10** as well as option “**Email**”.



0225 – Email parameters

12.5.1 Email recipient

With the function "mail recipient" you can either set constant values or index fields as an email recipient. The index fields can again be selected from the list of defined index fields using function key **F4**.



0226 – Email recipient

Type

The values allowed are:

A=To

C=CC Copy

B=BCC BlindCopy

Name or Index
Specify the recipient's name or enter an index field through which the recipient's name is determined.

Address or index
This is the email address of the recipient or the index field through which the email address is determined.

12.5.2 Email sender

With the function "Email sender" you can govern relevant parameters for sending an email. The function "Email sender" can be called with **F10** as well as option "**Email**" and "**Email sender**".

0227 - Email sender information

Mailbox
Specify in which mailbox the email to be sent is processed.

The values allowed are:

Name The name of any existing mailbox

***OWNER** The name of the user's mailbox at the time of processing the spoolfile

Sender's name/Index
The name of the email sender.

The values allowed are:

Name An entered value that is used constantly as the sender's name

Index An entered index field from which the sender's name is taken. Existing index fields can be selected with function key **F4** and option **1**.

***MAILBOX** The sender's name is used from the mailbox specified in the parameter "Mailbox".

Sender's address/index

The sender's email address.

The values allowed are:

Name An entered value that is used constantly as the sender's email address

Index An entered index field from which the sender's email address is taken. Existing index fields can be selected with function key **F4** and option **1**.

***MAILBOX** The email address is used from the mailbox specified in the parameter "Mailbox".

Priority

The priority with which the email should be delivered is set here.

The values allowed are:

H The email is sent with high priority

N The email is sent with normal priority

L The email is sent with low priority.

Read confirmation

If a recipient receives an email with read confirmation and his email program supports this function, he will be asked whether a receipt confirmation should be sent back to the sender. When the recipient confirms this question with Yes, the sender will receive confirmation that the recipient has received and read the message.

The values allowed are:

Y Request read confirmation

N Do not request read confirmation

Encrypt email

Specify here whether the processed email is sent encrypted.

The values allowed are:

Y Email is sent encrypted

N Email is not sent encrypted

M Email is sent encrypted if a certificate exists

Sign Email

Specify here whether the processed email should be signed.

The values allowed are:

Y Email is signed

N Email is not signed

Hold email

Specify here whether the processed email is to be held in the outbox or sent immediately.

The values allowed are:

Y Hold email

N Do not hold email, it will be sent immediately

Schedule time

With this parameter, you specify at what time an email should be sent.

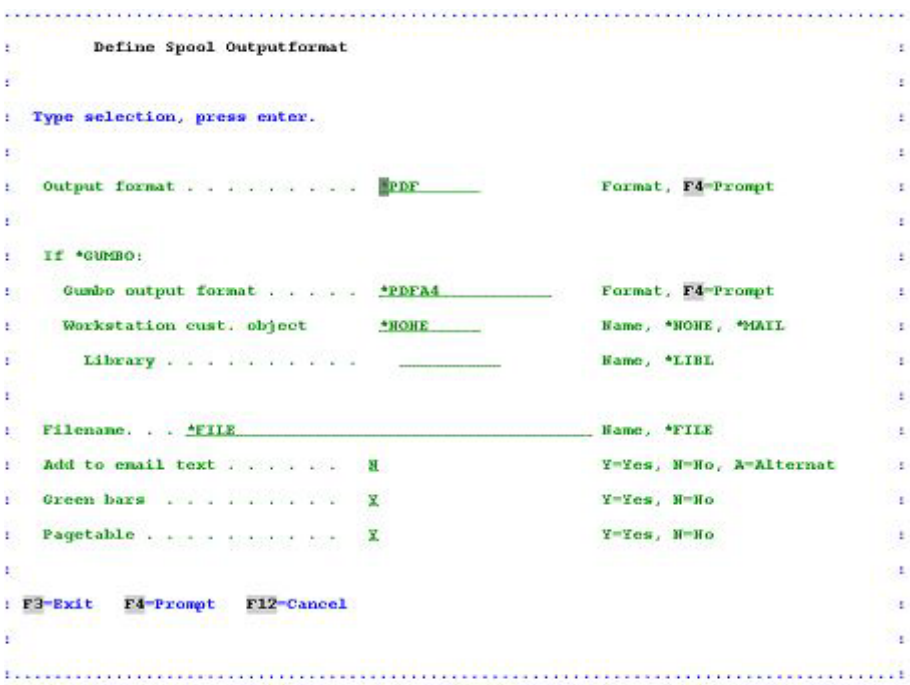
The values allowed are:

Time The email is only sent at the set time

Empty The email is sent immediately

12.5.3 Spool output format

DirectMail can convert spoolfiles into different formats before they are sent with AutoMail. The formats are defined with the "Output format" function.



0228 – Define spool output format

Output format

Specify in which format the spoolfile should be attached to the email

The values allowed are:

Format

***CSV** The spoolfile is converted to semicolon-delimited text and attached.

***TXT** The spoolfile is converted to ASCII text and attached.

***HTML** The spoolfile is converted into an HTML document and attached.

***PDF** The spoolfile is converted to PDF format (read with Acrobat Reader) and attached.

***EPDF** Adobe's PDF file format, but in the Enhanced Version of DirectView PDF. This format supports elements such as form overlays, allowing you to use background JPG or TIF files with the spool to create complete printed forms.

When selecting the EPDF format, please refer to the chapter PDF-form**Fehler! Es wurde kein Textmarkenname vergeben.**.

***TIFF** The spoolfile is converted to a TIFF graphic and attached.

***ORIG** The email recipient works with DirectMail and can view the spoolfile in iSeries format.

***GUMBO** The spoolfile is converted by Gumbo SPLAMATIC and attached.

***RAW** Copies the pure data stream to a PC file (used for PCL and AFP).

***HPT** The spoolfile is converted into an HPT document and attached.

***NONE** The spoolfile is not converted and not attached to the email. This is useful if you want to use the spool output as the trigger or delivery mechanism for index information for an email.

Gumbo output format

Enter the standard format for SPLAMATIC from Gumbo; the different formats can be displayed through **F4**.

Workstation customising object

With conversion using host-print-transform, you can insert a workstation customising object which will be used when converting the printer data stream.

Library

Enter the name of the library in which the workstation customising object is saved.

File name

Specify the name of the attachment into which the spool is converted. This parameter is mainly used to give the attachment a descriptive name (e.g. instead of REPRTFMT, INVOICE is used as a spoolfile name).

The values allowed are:

Name A name for the attachment

***FILE** The attachment uses the spoolfile name.

Attach to email text

Specify whether the spoolfile should be sent as an attachment or as a text.

The values allowed are:

Y The object content should be used as text.

N The object content should be used as an attachment.

A The content of the spoolfile should be attached as alternative text to the email and consequently recipient sees this text directly.

Green bars (GREENBAR – with HTML format

Specify whether the lines in the HTML format should be separated by white/green bars (giving the effect of a print on paper stock).

The values allowed are:

Y Green bars are added

N No green bars are added

Pagetable (PAGETABLE)

With documents containing multiple pages, a page table is inserted in the HTML format at the beginning of the document, ensuring better navigation.

The values allowed are:

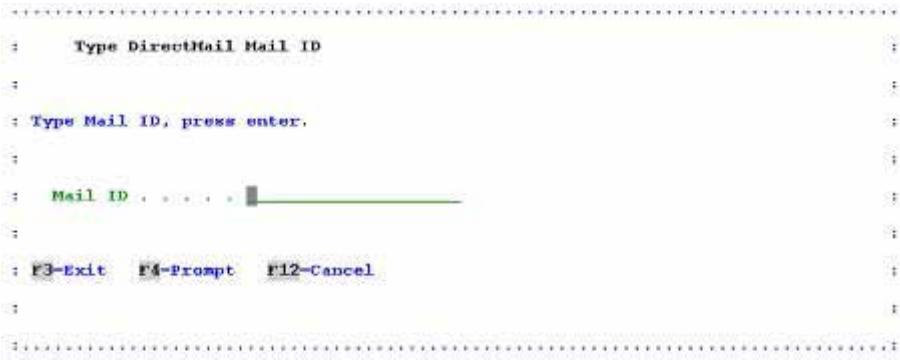
Y A page table is inserted

N No page table is inserted

12.5.4 Email text

Every sent spoolfile can be completed with a predefined text, which is saved as an email in the mailbox. So you can attach a formatted standard text, e.g. standard phases, when sending offers.

Predefined email texts can be created by simply creating an email with the Editor and then saving it only and not sending it. With the function &INDEX you can integrate a variable into the email text. Here &INDEX stands for the name of a variable, which you previously created through the function “Indexes“. So you can achieve a constant text with variable texts, e.g. for personalised forms address, in the standard text.



0229 – Specify DirectMail mail ID

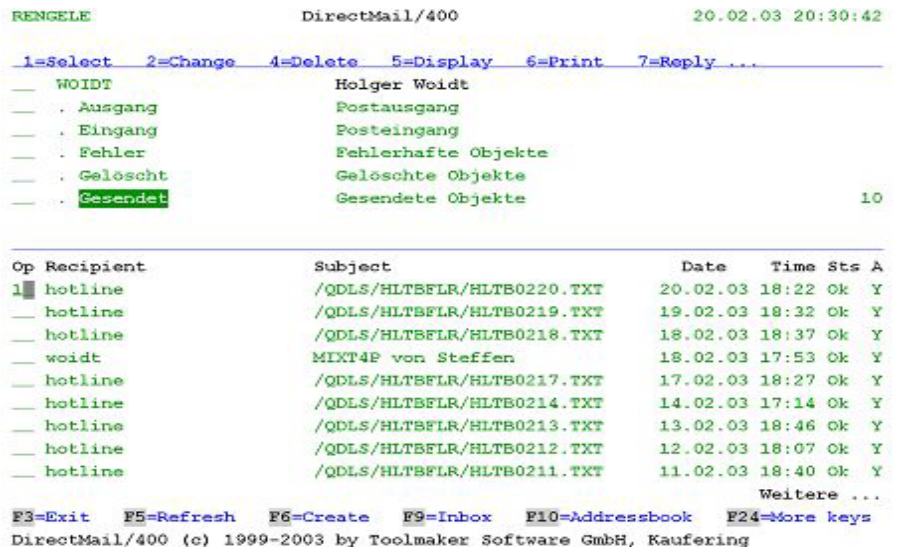
Mail ID

Enter the name of a saved email or search in the mailboxes for a current email with function key **F4**.

0230 – Mail ID

First select a mailbox with option **1** to which you want to attach an email.

The next step is for you to branch directly into the mailbox and thus have the possibility, with option **5**, to select a folder for displaying saved emails. You can also alternatively create a new email with function key **F6**.



0231 – Select email

Select the desired email with option **1**.

0232 – Email confirmation

Confirm with Enter.

12.5.5 PDF form

When using the format *EPDF (Extended PDF) the spool data is converted into a PDF document with a previously saved form mixed in.

You can activate the function “PDF form“ with **F10** as well as option "**Email**" and "**PDF form**".

0233 – PDF form details

Paper size

Specify the paper size for the PDF file.

The values allowed are:

***A0 to *A6** DIN (German industry norm) formats

***B6** DIN (German industry norm) format

***LEDGER, *LEGAL, *LETTER, *P11X17**. Various other formats.

Rotate page
Specify whether the form should be rotated to landscape format.

The values allowed are:

***SPLF** The value for the spoolfile page rotation is used

***YES** The form is in landscape format

***NO** The form is not in landscape format

***AUTO** The form is automatically rotated so that the margins are not crossed.

CPI
Here you can set individual text widths in CPI (characters per inch) differing from the spoolfile.

The values allowed are:

Number A valid CPI setting (e.g. 5,8,10,12,15,16,7...)

0 The spoolfile CPI value is used

LPI
Here you can set individual text heights in LPI (lines per inch) differing from the spoolfile.

The values allowed are:

Number A valid LPI setting (e.g. 5,8,10,12,15,16,7...)

0 The spoolfile LPI value is used

Form name
Enter the name of the forms to be added to the PDF file. These files must be filed in the FORMS directory of DirectMail400. The special value *FIRSTPAGE means, that in case of documents with multiple pages the same form like for the first page is applied for the continuation pages.

You can select a form from a list of saved documents with the function key **F4** and option **1**.

Form margins
Enter the margins top, bottom, and left in mm. that should be kept on the first page and on the continuation pages as well.

Font
When using Unicode conversion, specify the PDF font for character conversion.

Codepage CCISD

When using Unicode conversion, specify the CCSID to ensure that characters are properly displayed in PDF format.

Text offset coordinates

X axis mm

Allows you to move the original spool text right (values in mm). Negative values shift the text left.

Scale X

Type in the scaling factor for the original spool text.

The values allowed are:

Number – A percentage of the original size (for example 90 = 90%, 120 = 120%)

***NO** – Do not scale

***YES/*FIT** – Scale to page-size – keeps the spool text within the page margins.

Y axis mm

Allows you to move the original spool text down (values in mm). Negative values shift the text up.

Scale Y

Type in the scaling factor for the original spool text.

The values allowed are:

Number – A percentage of the original size (for example 90 = 90%, 120 = 120%)

***NO** – Do not scale

***YES/*FIT** – Scale to page-size – keeps the spool text within the page margins.

12.5.6 PDF security

When sending PDF files, they can be sent encrypted thus the possibilities of further processing are limited.

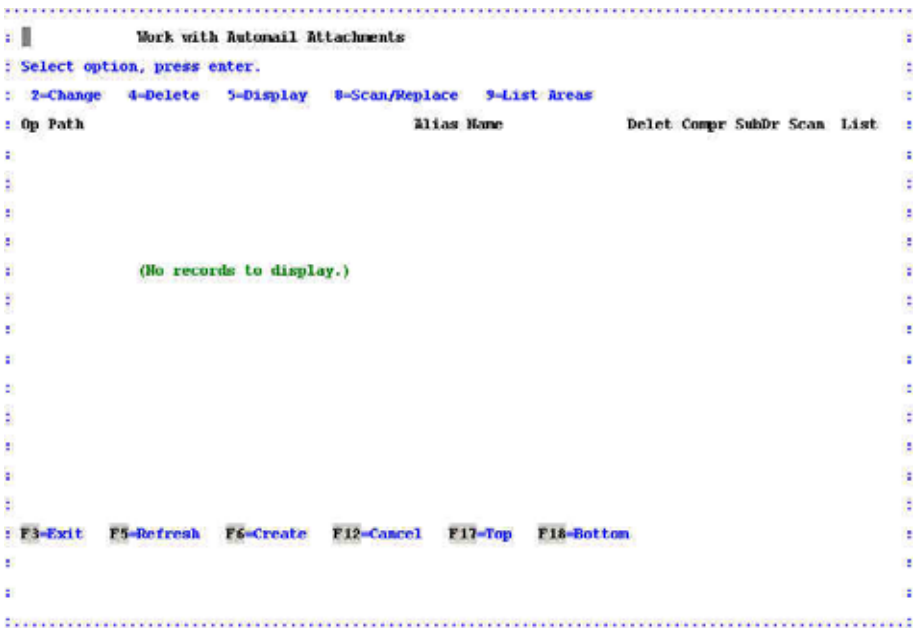
0234 - PDF security

The parameters for PDF security are all described in the command CRTSECPDF, which is described in the chapter "Email APIs".

12.5.7 Email attachments

Additionally to the converted spoolfiles, further IFS files can be attached to an email. For this you can define the attachments here. Like in the WRTEMLAPI command a generic search can be defined here as IFS path. Also index fields can be defined in the path name as well as in the alias name. Also subdirectories can be searched.

With this function in connection with the option to determine multiple occurrences of index values, e.g. all article numbers from a spoolfile can be identified and corresponding pictures, PDF files or drawings from the IFS can be added. Double occurrences are eliminated automatically in order to prevent the sending of multiple identical files in case of identical index values.



0235 – Work with AutoMail attachments

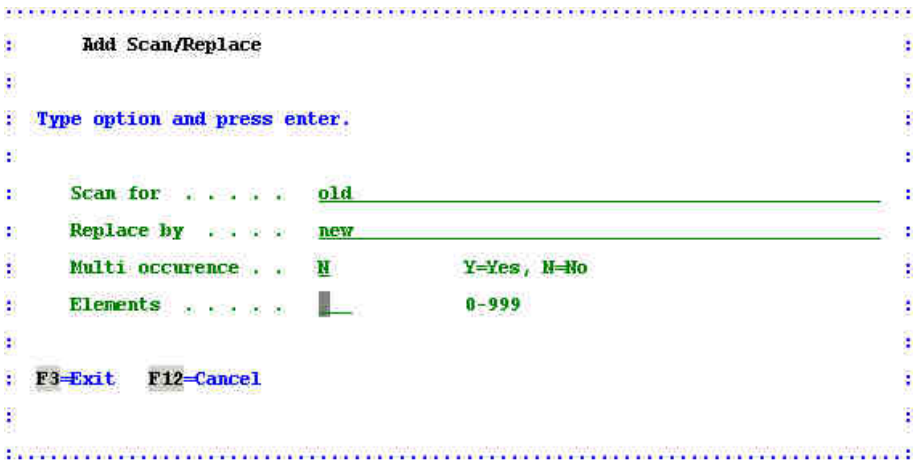
Options

2=Change
Allows you to change AutoMail attachment information.

4=Delete
Deletes an AutoMail attachment.

5=Display
Displays an AutoMail attachment.

8=Search/replace
Allows you to search and replace values and index values within an AutoMail attachment.



0314 – Search and replace

The parameters are as follows:

Search for Search string

Replace by Replacement string

This string can also include index names (e.g. “&CUST“ or “Customer: &CUST“).

Multy occurrence

The values allowed are:

Y Search string may occur multiple times on page

N Search string occurs only once on page

Elements

This field defines the maximum number of elements in an index. Multiple element indexes might be used for example with lists. If this value is greater than 0, AutoMail adds "(n)" to the search string, so that for 5 elements, AutoMail searches and replaces ITEM(1), ITEM(2), ITEM(3), ITEM(4) and ITEM(5). If the replacement value includes a multiple index, AutoMail uses the corresponding element in the index. If the index element does not exist, the search string is replaced with spaces.

The values allowed are:

0-999 Number of elements

9=List area

The list function adds list indexes that occur more than once as a list in the output file. You might use this for example for orders including headers and items you want to output in HTML or other PC file format.

Lists can be nested. Note that all indexes must be logically linked.

Example: *Order – Customer – Name – Date - Total*

Line – Item – Quantity – Price

Text lines

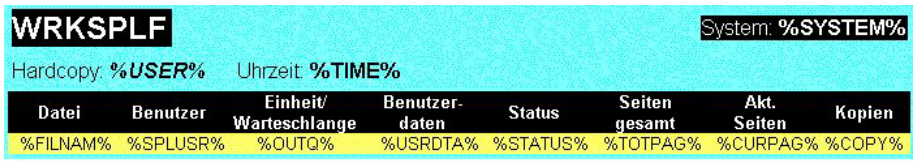
This example is nested twice. Every order can contain n lines and every line can contain n text lines.

The *Order* index is the main index. The *Order* field is assigned as a group index to *Customer, Name, Date* and *Total*.

The index *Position* is also assigned to the index *Order*, but as a level change index. The indexes *Item, Quantity, Price* are assigned to *Line*.

The *Text lines* also receives the index *Order* as a group index, although it is a level change index.

List area example:



WRKSPLF System: %SYSTEM%

Hardcopy: %USER% Uhrzeit: %TIME%

Datei	Benutzer	Einheit/ Warteschlange	Benutzer-daten	Status	Seiten gesamt	Akt. Seiten	Kopien
%FILNAM%	%SPLUSR%	%OUTQ%	%USRDTA%	%STATUS%	%TOTPAG%	%CURPAG%	%COPY%

0338 – HTML template for a WRKSPLF hardcopy

WRKSPLF System: FIDDY

Hardcopy: FIDDY Uhrzeit: Hier die Zeit

Datei	Benutzer	Einheit/ Warteschlange	Benutzer-daten	Status	Seiten gesamt	Akt. Seiten	Kopien
BL6101P	FIDDY	DIRMAIL	EINMAL RG	RDY	1*		Copy ME
QPZLSPRTF	FIDDY	DIRMAIL		RDY	1*		Copy ME
LPDE5A4	FIDDY	DIRMAIL	TEST19 PCL	RDY	1*		Copy ME
QPJOBLOG	FIDDY	QEZJOBLOG	QDFTJOBD	RDY	1		Copy ME
QPJOBLOG	FIDDY	QEZJOBLOG	QPADEV0005	RDY	10		Copy ME
QPRINT	FIDDY	QPRINT		RDY	1		Copy ME
QPJOBLOG	FIDDY	QEZJOBLOG	QPADEV0005	RDY	1		Copy ME
QPRINT	FIDDY	QPRINT		RDY	1		Copy ME
QPRINT	FIDDY	QPRINT		RDY	1		Copy ME

0337 – Result

Prerequisites

A defined HTML file (or another format) containing placeholders for the indexes to be added. You can use different names or text for the placeholders.

To display lists, the start and end of the list block must be identified in the file.

This section of the HTML file describes the structure of a list area. The start and end of the list area are defined with the comment lines <!--STARTLIST--> and <!--ENDLIST-->. The placeholders for indexes are defined with the %INDEX% entries.

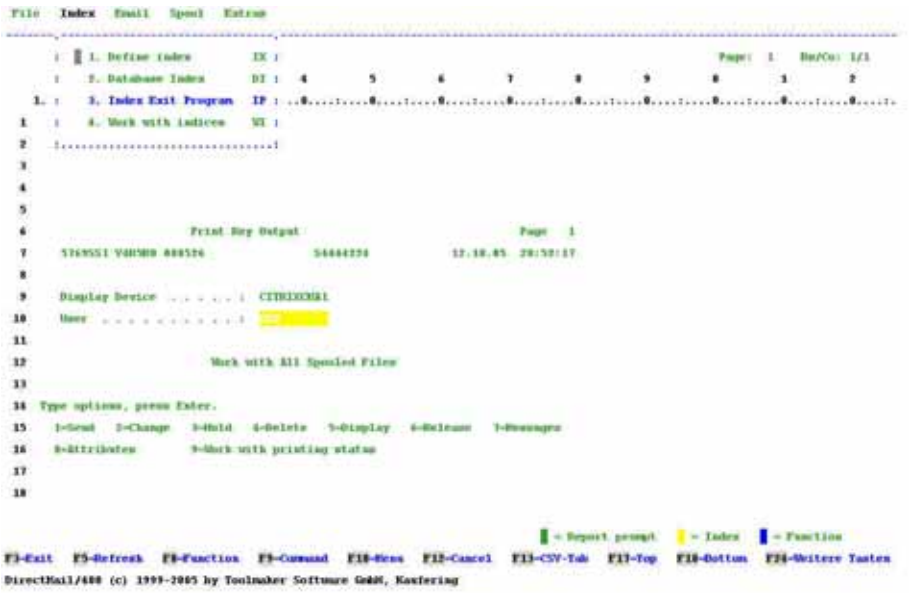
Automail searches for these placeholders and replaces them with the indexes from the spoolfile.

Sample HTML file:

```
…
</td>
</tr>
<!--STARTLIST-->
<tr bgColor="#6699ff">
<td colSpan="1" rowSpan="1" bgColor="#6699ff">
<P align="right"><FONT face="Arial" size="2">%FILNAM%</FONT></P>
</td>
<td bgColor="#6699ff">
<P align="right"><FONT face="Arial" size="2">%SPLUSR%</FONT></P>
</td>
<td bgColor="#6699ff">
<P align="center"><FONT face="Arial" size="2">%OUTQ%</FONT></P>
</td>
<td bgColor="#6699ff">
<P align="right"><FONT face="Arial" size="2">%USRDTA%</FONT></P>
</td>
<td bgColor="#6699ff">
<P align="right"><FONT face="Arial" size="2">%STATUS%</FONT></P>
</td>
```

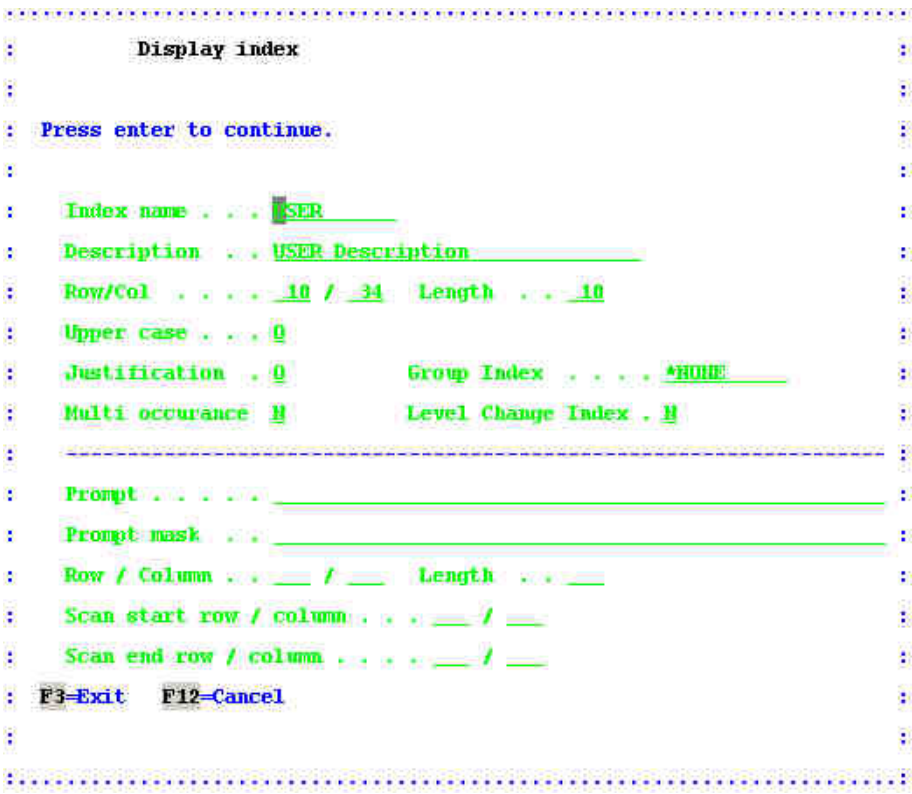
```
<td bgColor="#6699ff">
<P align="right"><FONT face="Arial" size="2">%TOTPAG%</FONT></P>
</td>
<td bgColor="#6699ff">
<P align="right"><FONT face="Arial" size="2">%CURPAG%</FONT></P>
</td>
<td bgColor="#6699ff">
<P align="center"><FONT face="Arial" size="2">%COPY%</FONT></P>
</td>
<td bgColor="#6699ff">
</td>
</tr>
<!--ENDLIST-->
</table>
...
```

For information on defining an index and the associated parameters, please refer to chapter 12.4.1.



0330 – Index creation: For the field User in this case

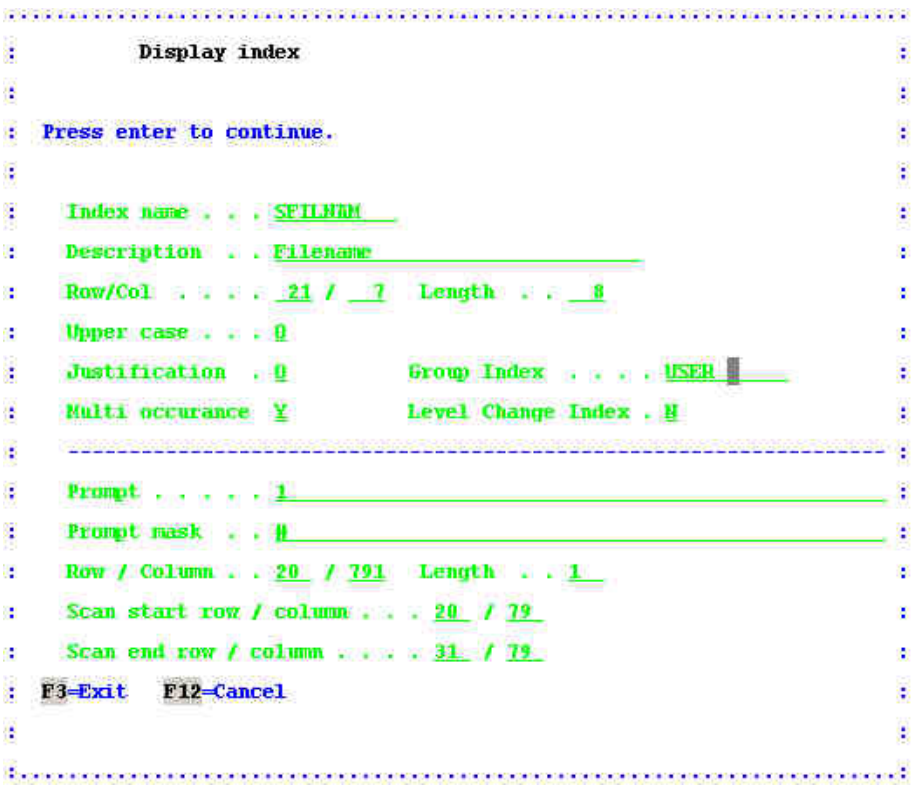
Every list area requires a level change index (for example order line) to which the other indexes are assigned.



0328 – Display index

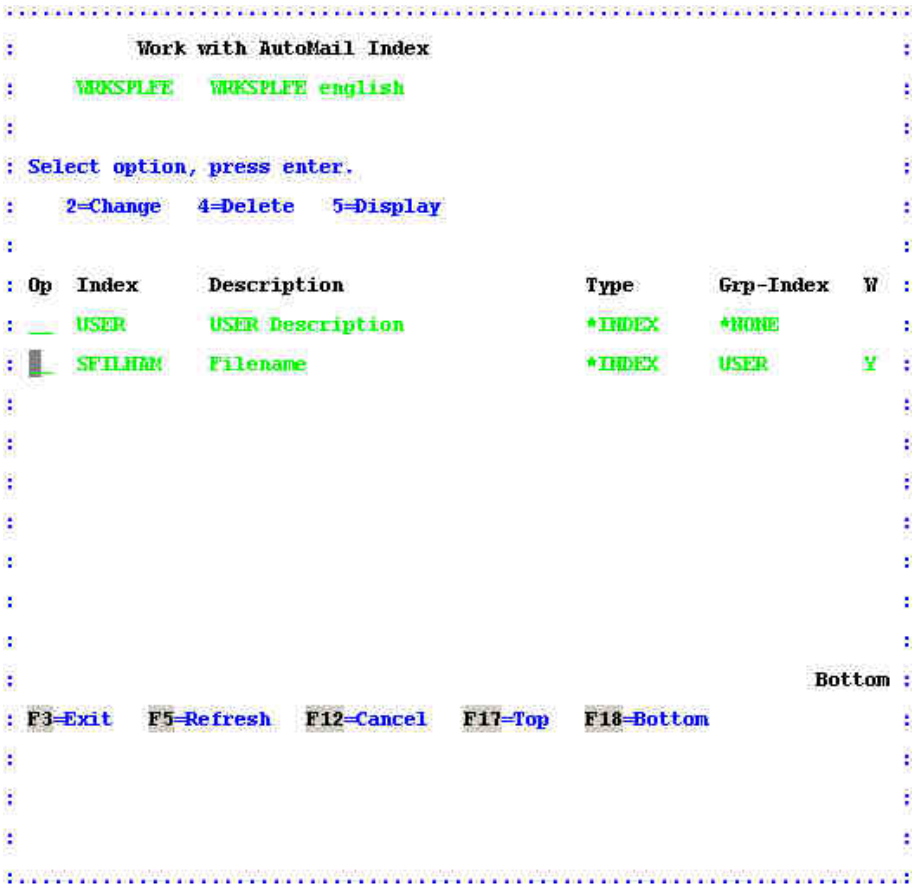
Note: In this example, the User field is the main index for the page. It is the highest-level index. For this reason, Group Index is set to *NONE and Level Change to "N'". All other indexes are now assigned to the User index.

Index name
Description
Line/column
Length
Capitalisation
Orientation
Group index
Multy occurrence
Group change index
Prompt
Prompt mask
Line/column
Length
Scan start line / column
Scan end line / column



0329 – Group index(lower-level index)

Each occurrence of the index SFILNAM represents a group change. Level Change is therefore set to Y. This index is also subordinate to the main index USER.

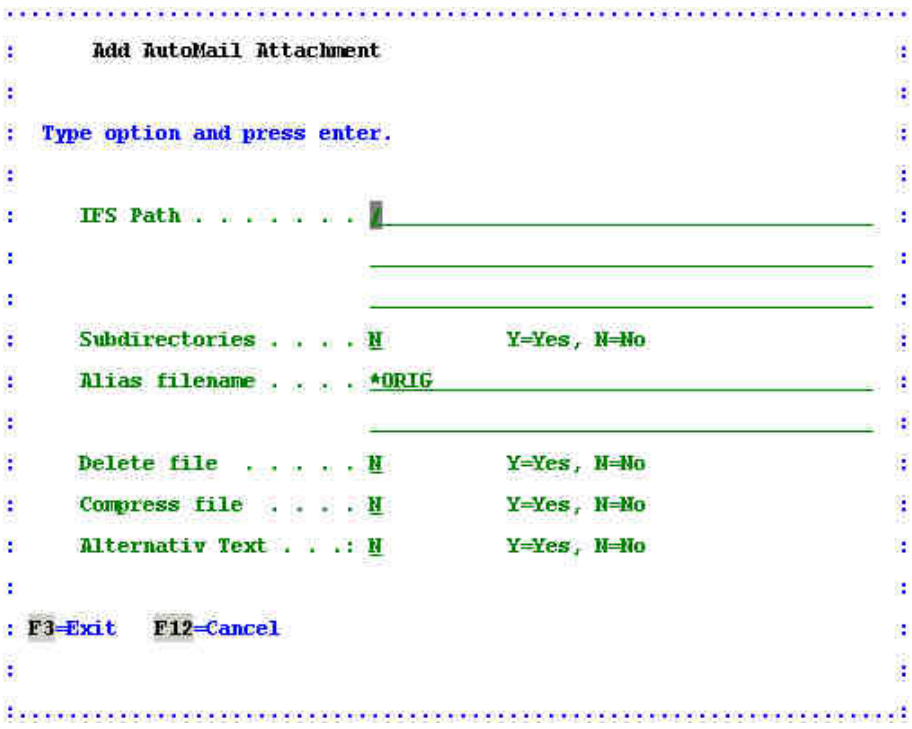


0327 – Index definitions

In this type of list output, all indexes in the spoolfile must be assigned to a group index.

After defining all indexes, you will need to specify where they are added and the location of the HTML list area in each AutoMail attachment.

0331 – Work with AutoMail attachments



0236 – Add AutoMail attachment

IFS path
The path for the HTML file

Sub directories
Allows you to attach complete directory trees. In this example however, we are working with files, not directories.

Alias file name
The file name the recipient sees in the email. The name can contain placeholders for index values (&CUST).

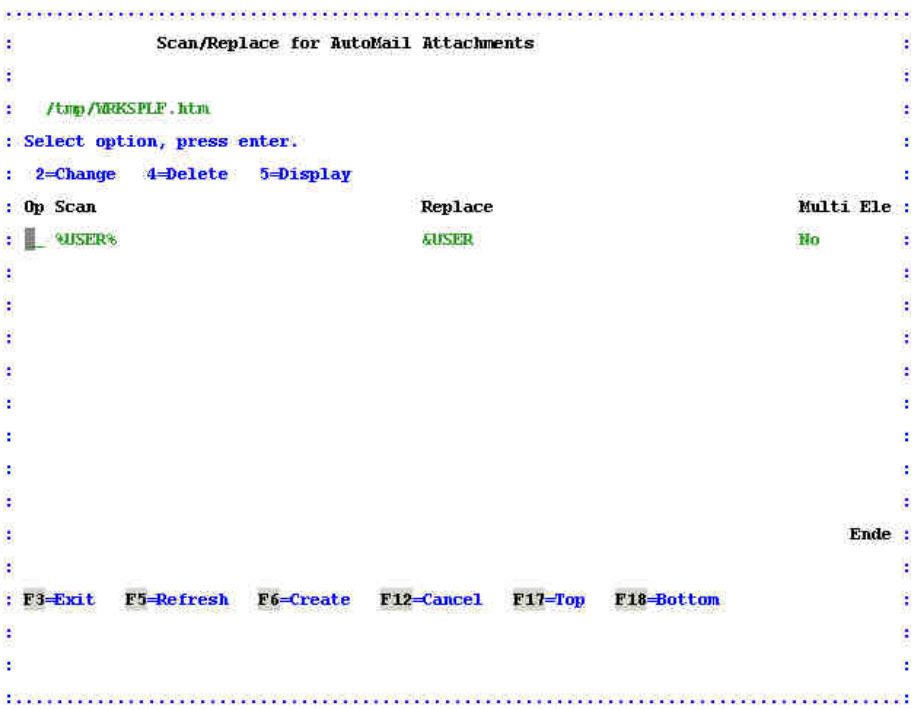
Delete file
Specify whether the file should be deleted after processing. Because we are working with templates, set this value to N.

compress file
Allows you to compress the file.

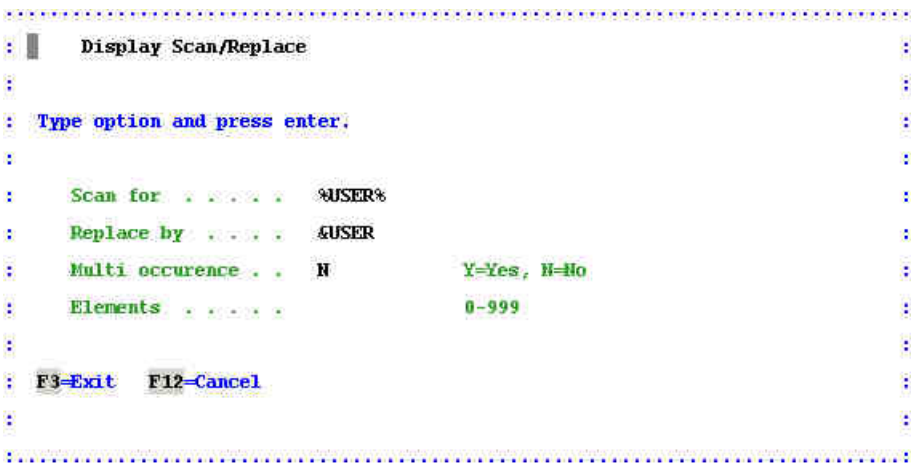
Alternative text
Set this value to Y if you want to use the converted HTML file as the email text. Set to N to create a standard attachment.

8=Search/Replace
After defining the attachment, links the HTML placeholders with the indexes.

Note: Only indexes added at file level are specified at file level. Indexes in list lines are defined in the list areas.



0332 – Scan/replace for AutoMail attachments



0332 – Display Scan/Replace Replace the placeholder %USER% with the index USER.

Search string

The search string (placeholder) in the HTML file.

Replace with

A string to replace the search string. Indexes are prefixed with &. You can mix index values and text constants.

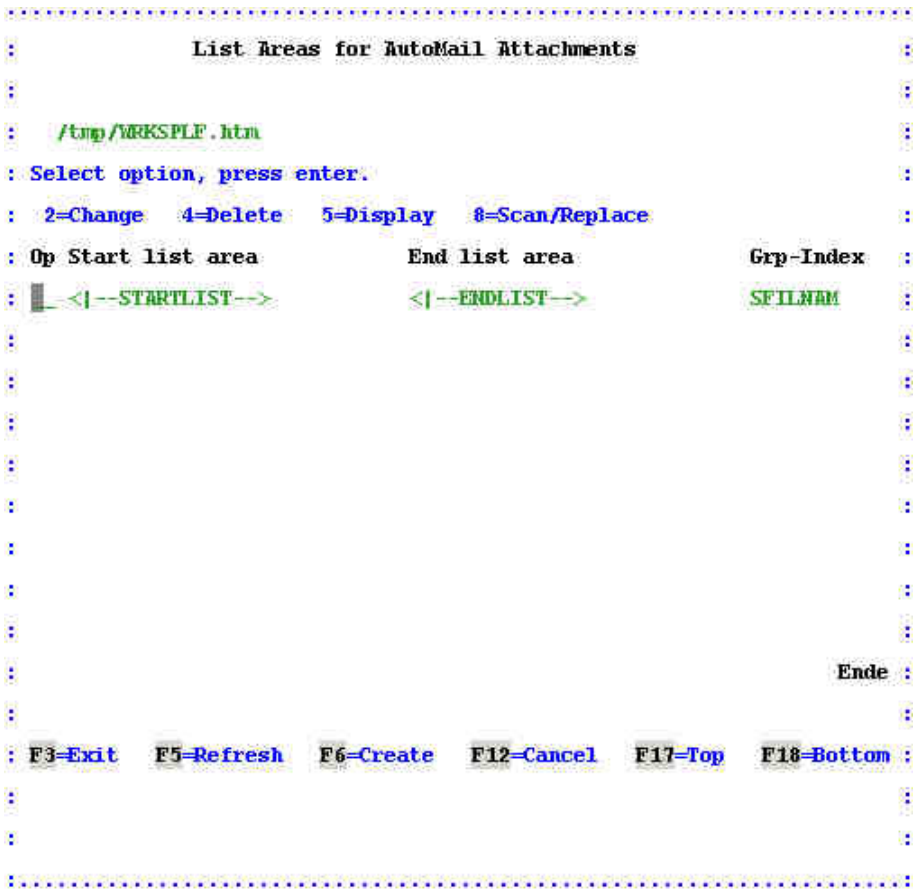
Example: "Payment for invoice &INVNO immediately"

Multi occurrence

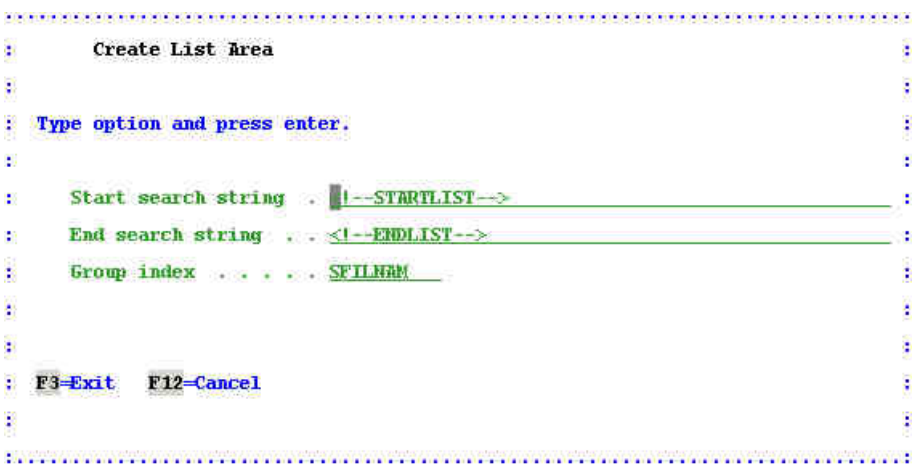
Specifies whether the placeholder may occur more than once in the HTML file.

Elements
This field is no longer used.

9=List areas
Defines the areas for list lines and associated indexes.



0333 – List areas



0334 – Create list area

Start character string
The start position of the list area.

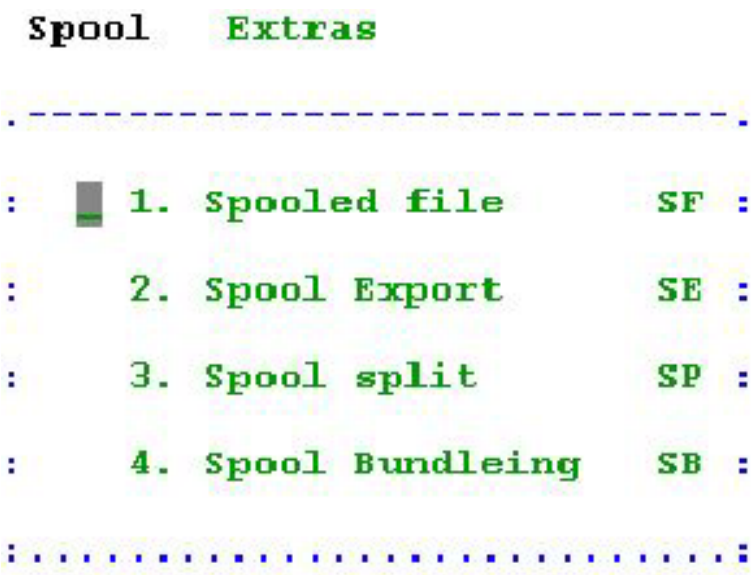
End character string
The end position of the list area.

Group index
The name of the group index: Each occurrence of the index outputs the list area.

You must also use 8=Scan/Replace to define the replacement values (indexes) for all placeholders in the list area.

12.6 Spool actions

Under the function "Spool", which is available through F10 as well as option "Spool", several settings can be activated, which affect the spoolfiles to be processed.

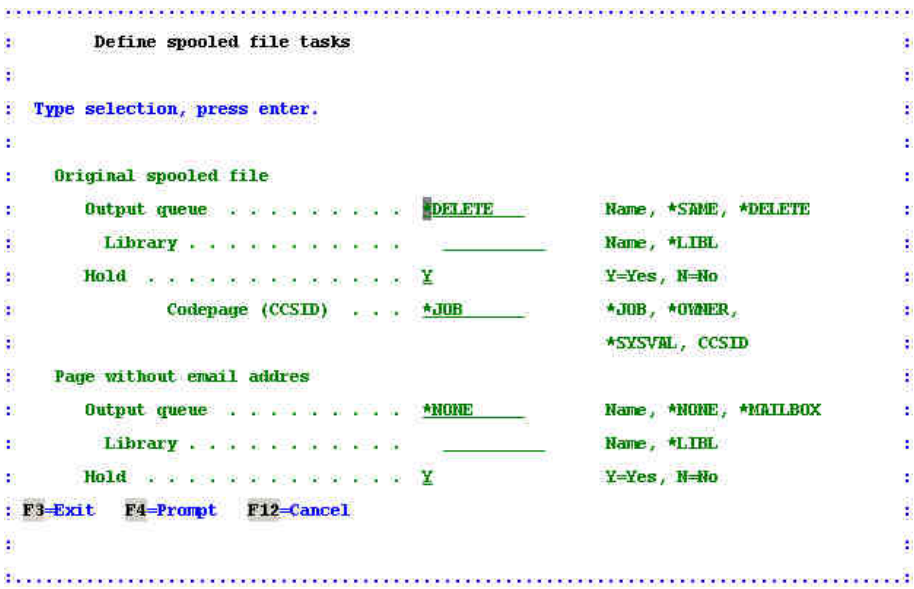


0237 – Spool actions

12.6.1 Spool file

With AutoMail, processed spoolfiles must be deleted as a rule after being processed. However, in order to react flexible to requirements, an option has been built into DirectMail, with which you can govern what happens with the processed spoolfiles.

The dialog can be activated with the function key F10 as well as option "Spool" and "Spool files".



0238 – Define spoolfile actions

Original spoolfile

Outqueue/library

Specify whether the spoolfile is deleted after being processed or copied into an output queue.

The values allowed are:

Name The name of an output queue into which the spoolfile is copied after being processed.

***SAME** The spoolfile stands in the original output queue.

***DELETE** The spoolfile is deleted after being processed.

Library

The outqueue's library.

Hold

If spoolfiles are copied into an output queue or remain in the original output queue, you can hold them, with this parameter, to avoid a renewed processing.

The values allowed are:

Y = Yes, the spoolfile is put into the output queue with the status HLD after being processed.

N = No, the spoolfile is not held after being processed.

Codepage CCSID

Select the codepage.

The values allowed are:

***JOB** The job codepage is used.

***OWNER** The owner codepage is used.

***SYSVAL** The system codepage is used.

***CCSID** The codepage entered is used.

Pages without email address

Outqueue/library
Spool files are put into the specified queues, as no email address has been determined.

The values allowed are:

Name The name of an output queue through which the document can then be printed or which may serve as a buffer for identifying missing email addresses and for re-sending the document after completion of the master files.

***NONE** The spoolfile is put into a separate output queue.

***MAILBOX** The spoolfile is not put into a separate queue but sent to the owner of the mailbox.

Library
Library of the outqueue

Hold
With this parameter spoolfiles not processed can be held.

The values allowed are:

Y = Yes, the spoolfile is put into the output queue with the status HLD after being processed.

N = No, the spoolfile is not held after processing.

12.6.2 Spool export

In order to make spoolfiles sent with AutoMail available for further processing, the function “Spool export” is available which you can activate with **F10** as well as option "**Spool**" and "**Spool export**".

The following parameters have to be seen as succeeding parameters, i.e. at first the spoolfile is exported, then optionally a CSV file. Then an Exit Program or a command for archiving is executed and at last the created files (Spool + CSV) are deleted optionally.

0239 – Define spool export

Path for file export

Enter the path for the directory in the integrated file system, into which the processed spoolfiles should be exported. The name of the spoolfile is composed of the current batch number and a sequence number as well as the extension .PDF in order to avoid the repetition of file names.

The path name for AutoMail export files can now also contain index fields. E.g. you can carry out the export into a directory /TMP/&KDNR/&AUFNR..., if the variables were previously defined. The path is created by DirectMail itself, provided that it does not yet exist. In addition new field names are supported for AutoMail:

ATMDEF AutoMail definition name
IFSFIL IFS file name for export file
IFSPTH IFS path
IFSOBJ IFS object (path+file name)
ALIAS Alias name for the email attachment file
SPLFIL Spool file name
SPLUSR Spool user
SPLJOB Spool job name
SPLJNR Spool job number
SPLFNR Spool file number
SPLSTS Spool status (e.g. *READY)
SPLUDT Spool user data
SPLDAT Spool date YYYYMMDD
SPLTIM Spool time HHMMSS
SPLFRM Spool form type
SPLPAG Spool number of pages
CSVFIL CSV file name
CSVPTH CSV file path in IFS
CSVOBJ CSV object (path+file name)
TMPPTH Temporary IFS path
TMPOBJ Temporary IFS object (path+file name)
SPLYEA Spool date year (4-digit)
SPLYE2 Spool date year (2-digit)
SPLMON Spool date month

SPLDAY Spool date day
SPLHH Spool time hours
SPLMM Spool time minutes
SPLSS Spool time seconds

Using the character '<' the end of an index name can be defined. E.g. if index CUSTOMER=14711 and export path =/&CUSTOMER<addition then AutoMail will use the path /14711addition.

File name
Enter the name of the file to be exported.

Index export to CSV
If a file is exported, a data record in the CSV format can optionally be written into a file. The file name corresponds to the name of the PDF file with extension .CSV

The values allowed are:

Y The CSV file is created

N The CSV file is not created.

Exit program/library
After a successful export of files, a user-specific program can be called which transfers the files at the same time into an archiving system, for example.

The values allowed are:

***Name** Name of the program to be called

***NONE** No program called

***MAILBOX** File transferred to the mailbox

Archive command
Alternative to the Exit Program, a command for archiving can also be started directly for processing the files.

Delete file
When the Exit Program or the command for archiving have completed, the created files can be deleted again with this program.

The values allowed are:

Y The created files are deleted

N The created files stay in the directory and must be deleted manually.

12.6.2.1 Spool command for archiving

Generally, in the AutoMail archive interface (Menu Spool / Export) all self-created index fields can be entered with a **&** in front of the name, e.g. index name CUNO, parameter name &CUNO.

In addition, over 20 standard parameters are available, most of them with spoolfile attributes.

The following reserved names are then useable for parameters at the Spool export/archive interface from AutoMail (it must be currently started with a &, e.g. &SPLFIL):

ATMDEF AutoMail definition name
IFSFIL IFS file name for export file
IFSPTH IFS path
IFSOBJ IFS object (path+file name)
ALIAS Alias name for the email attachment file
SPLFIL Spool file name
SPLUSR Spool user
SPLJOB Spool job name
SPLJNR Spool job number
SPLFNR Spool file number
SPLSTS Spool status (e.g. *READY)
SPLUDT Spool user data
SPLDAT Spool date YYYYMMDD
SPLTIM Spool time HHMMSS
SPLFRM Spool form type
SPLPAG Spool number of pages
CSVFIL CSV file name
CSVPTH CSV file path in IFS
CSVOBJ CSV object (path+file name)
TMPPTH Temporary IFS path
TMPOBJ Temporary IFS object (path+file name)

Example of a command for archiving

Note:

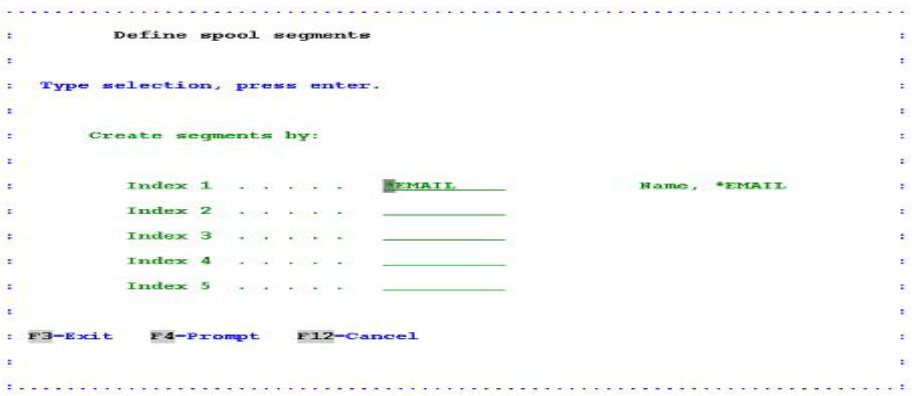
As a rule, the archiving software is itself a third-party product and not a component of DirectMail!

ADDTOARC FILE(&IFSOBJ) INDEX1(&CUNO) INDEX2(&SPLFIL)

12.6.3 Spool segmentation

When processing large spoolfiles, which consist of single elements, e.g. a summary billing consisting of 500 pages altogether but segmented into 280 single bills, the spoolfiles must also be separated.

The definition of this function is done in the “Spool segment“ which is activated with **F10** as well as option "**Spool**" and "**Spool segment**".



0240 – Define spool segments

Index 1-5

Specify here according to which criteria the separation of the whole spoolfile into single documents should take place.

The values allowed are:

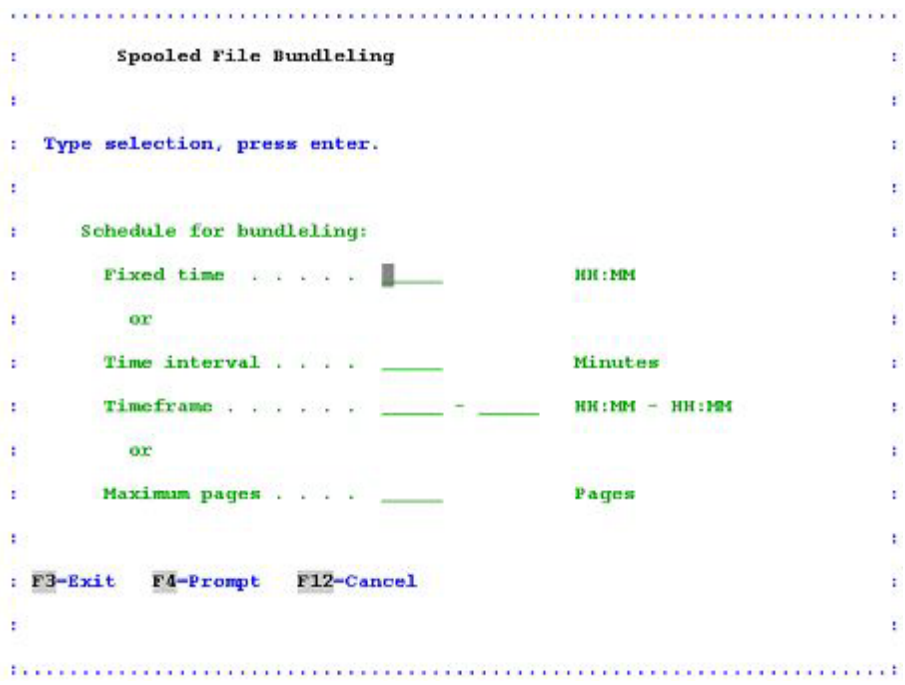
Name The name of one or several index fields, which should be regarded as separators for the segmentation of the spoolfile. The option of the index fields can also be selected with the function key F4.

Here you may have to take into account subsequent processing steps like for example the operation of an archiving interface. With the example of the separation of a summary billing, the division by the customer number may be useful as all successive customer bills are put together to constitute one email. When archiving, every bill however is required as one document. Therefore in this case, the separation must occur by the bill number.

***EMAIL** The division of spoolfiles occurs according to the email address, i.e. the spoolfile is separated with every newly occurring email address.

12.6.4 Spool bundling

Here you specify which criteria should match while creating spoolfile bundles:



0241 – Spool bundling

To the file names of the PDF files were added an ongoing number to ensure that no duplicate file names exist.

Fixed time

The bundling will be made at this specified time, for example daily at 6:00 p.m.

Or

Time interval
The bundling will be made after expiring of the specified time interval.

Time window
Here you can specify a time frame within the bundling should take place. For example only between 8:00 a.m. until 6:00 p.m..

Or

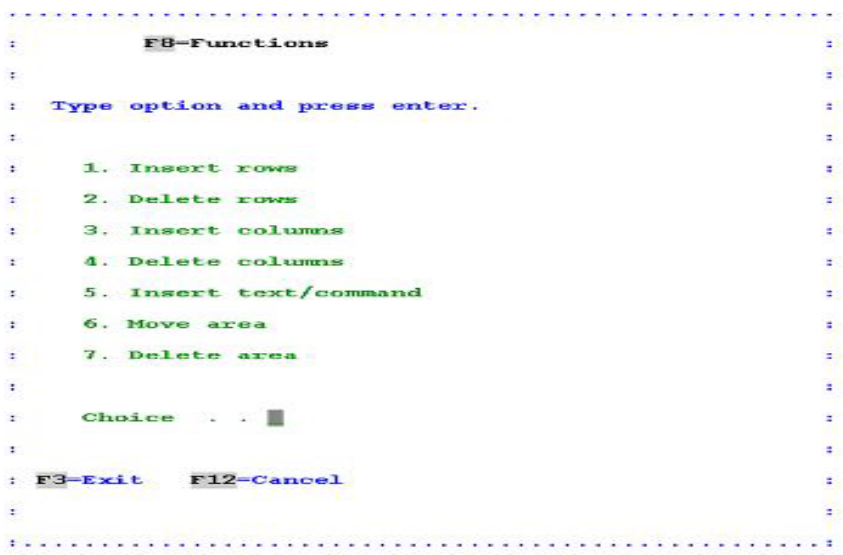
Number of pages
Specify the value here if the bundling should be closed after a defined number of pages.

12.7 Extras

Describe additional functions here.

12.7.1 Functions

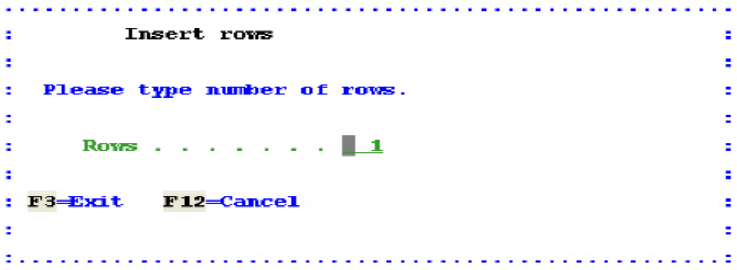
With SCS spoolfiles, AutoMail allows you to incorporate text functions.



0242 – Add functions

After selecting the desired function, select the desired start position for the function with the cursor key, confirm with the enter key and if necessary, enter further parameters, like e.g. the number of rows when inserting rows or the target position for movements.

When entering functions you will always be asked whether a prompt should be created. A prompt is a fixed point, which is referred to when carrying out the function. E.g. you could put a prompt on the constant term “job name” (when printing a job log). The following function is then only carried out if the defined term is also found at the highlighted position.

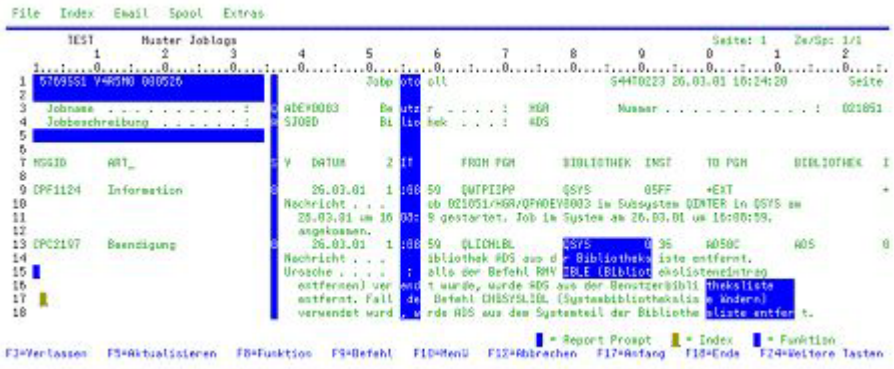


0243 - Function insert rows

Lines

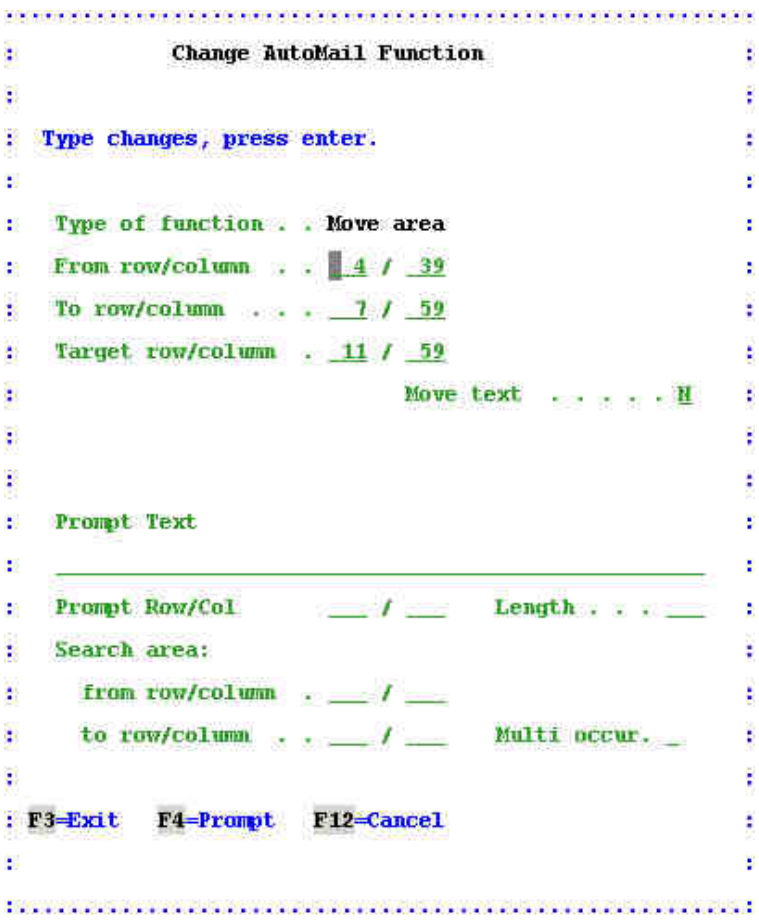
Number of lines to be inserted.

For every function that you carry out, the spoolfile gets an additional coloured mark. Consequently it is always obvious at which position which function was carried out.



0244 - Spool file with inserted functions

You will recognise the type of function if you press the enter key on a coloured highlighted area.



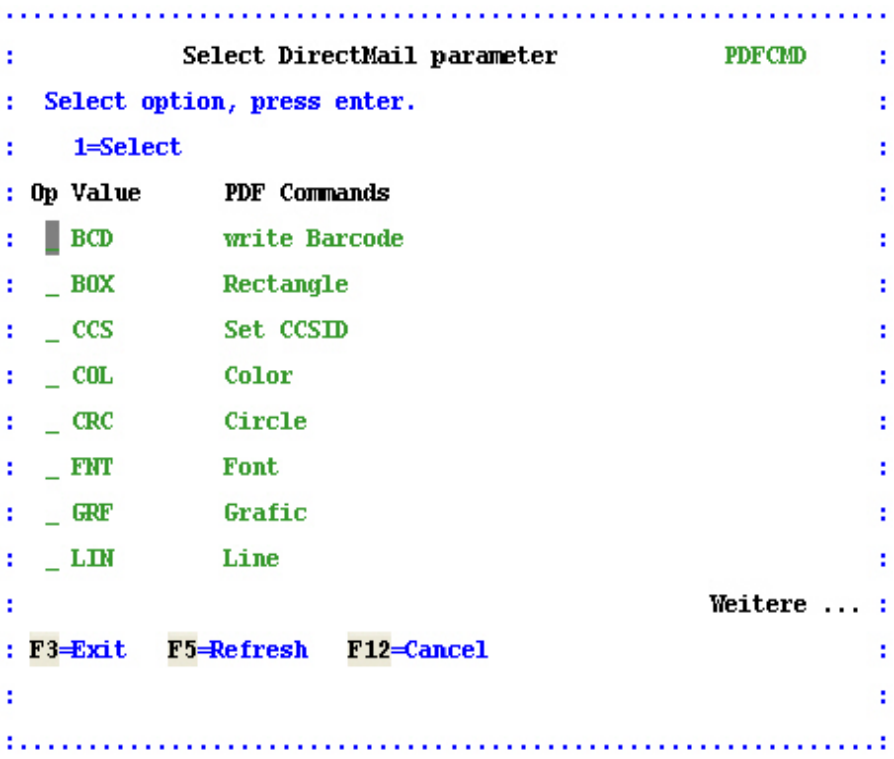
0245 - View/change the added function area

12.7.2 Function insert text/commands

This function is described separately as it provides very extensive functionalities with respect to the design of the spoolfile when sending or converting.

Also with the function Insert Texts/Commands, you must select a start position and confirm with the enter key.

When selecting commands you are supported by option F4.



0246 - Selection of commands

Select the desired command and enter the appropriate parameters.

0247 - Text input

The text parameter must now be added to the specific contents.

Note

PDF commands all begin with the character '^'. After that, the command name follows (e.g. ^grf). Parameters required for the command are put into brackets directly after the command. Every parameter is separated by a ','. Example: ^grf(auto.gif:*:*:1)

The characters ^ and : can be replaced by other characters if desired. The definition can be done in the data area DMDTAARA.

^grf(name: posx: posy: scale)

Adds graphics in the TIF, GIF, JPG format to the position with scaling. The graphics must exist in the directory /DirectMail400/Grafics.

Name Graphic name

posx Position in mm, *=current position

posy Position in mm, *=current position

Scale Scaling factor 1=100%

Example: ^grf(toolmaker.gif:40:*:0,5)

^sgn(name: posx: posy: scale)

Adds a signature in the TIF, GIF, JPG format to the position with scaling. The signature must exist in the directory /DirectMail400/Signatures.

Name Name of the signature, *OWNER, *CURRENT (DirectMail determines automatically which format (TIF, GIF, JPG) is concerned.)

***OWNER** Owner of the spoolfile

***CURRENT** The current user

posx Position in mm, *=current position

posy Position in mm, *=current position

scale Scaling factor 1=100%

^fnt(font name/number:number:font size)

Changes the current font and/or its size. The following fonts are currently available:

1=*Courier*

2=Courier Bold

3=Courier Oblique

4=Courier BoldOblique

5=Helvetica

6=Helvetica Bold

7=Helvetica Oblique

8=Helvetica BoldOblique

9=Times Roman

10=Times Bold

11=Times Italic

12=Times BoldItalic

13=Symbol

14=ZapfDingbats

font name/number Name or number of the font

*=current font

font size font size of the text

^box(posx: posy: width: height: border: fill: linewidth)
Draws a rectangle

Posx Position in mm, *=current position

Posy Position in mm, *=current position

Width Width in mm

Length Length in mm

Border 1 show border 0=no border

Fill 1 = fill rectangle

0=do not fill rectangle

linewidth Line width

Note Colours for borders or for fillings can be adjusted with the command ^col.

^lin(posx : posy: pos2x : pos2y : linewidth)
Shows a straight line

Posx Position in mm, *=current position

Posy Position in mm, *=current position

Linewidth Line width

^crc(posx: posy: radius: border: fill: linewidth)
Draws a circle

Posx Position in mm, *=current position

Posy Position in mm, *=current position

radius Radius in mm

border 1 show border

0=no border

fill 1 = fill circle

0=do not fill circle

linewidth Line width

Note Colours for borders or for fillings can be adjusted with the command ^col.

^pos(poxy : posy)
Changes the current cursor position

Posx Position in mm, *=current position

Posy Position in mm, *=current position

^col(typ: red : grn: blu)
Changes colours

typ 0=Colour of border

1=Colour for filling

2=Both

red Red colour intensity (0-255)

grn Green colour intensity (0-255)

blu Blue colour intensity (0-255)

^LPI(lpi)
Changes the current setting for LPI (lines per inch)

0=Auto

8=8 LPI

^SAV
Saves the current graphic settings (Recursion allowed)

^RST
Restores the previously saved graphic settings. (Recursion allowed)

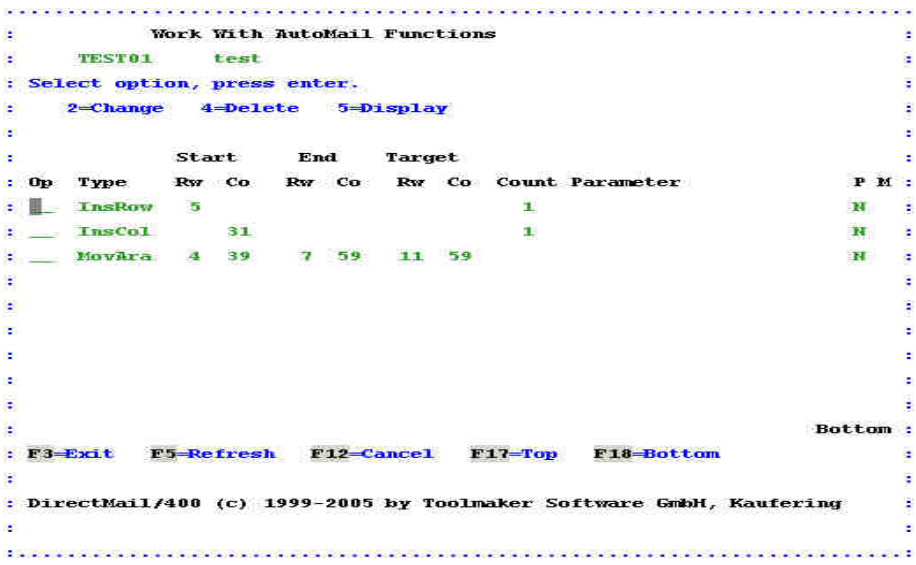
^BOK(text)
Creates a bookmark for the current page.

Test Text for the bookmark

Note With AutoMail index values in the text can be stated with &INDEX for example. These are then replaced, when being processed by AutoMail, by the index value.

12.7.3 Work with functions

With this function which you can call from the menu item Extras, all the selected functions are also shown to you for direct changes.



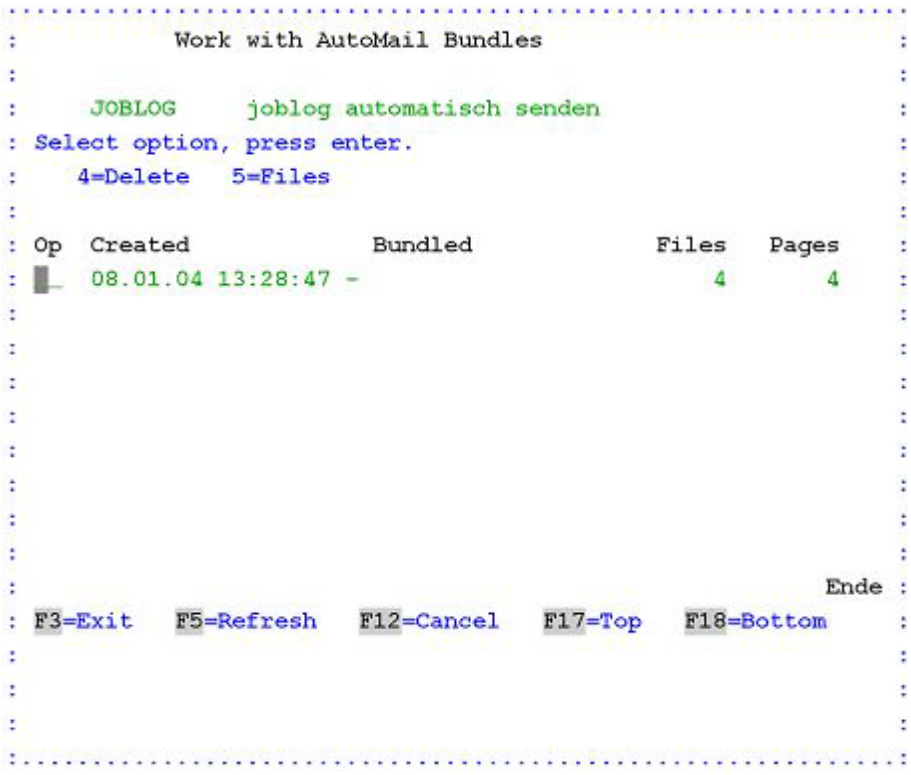
0248 - Work with functions

12.8 Work with spoolfile bundles

With AutoMail, you can bundle spoolfiles. For this you can specify when the bundle should be closed. The creation of the bundle is described in chapter Spool options – Bundling.

Automail collects all spooled files with SCS content and converts them as there was only one big spooled file.

With the option 10 Bundles in WRKATMDEF (Work with Automail definitions) you can see the status of the bundle together with the already bundled files. The files must not exist if the bundle will be closed, because DirectMail saves them temporary in database files.



0249 – Work with spoolfile bundles

Here you see the created an open bundles. Open bundles are defined with only timestamp created, not bundled

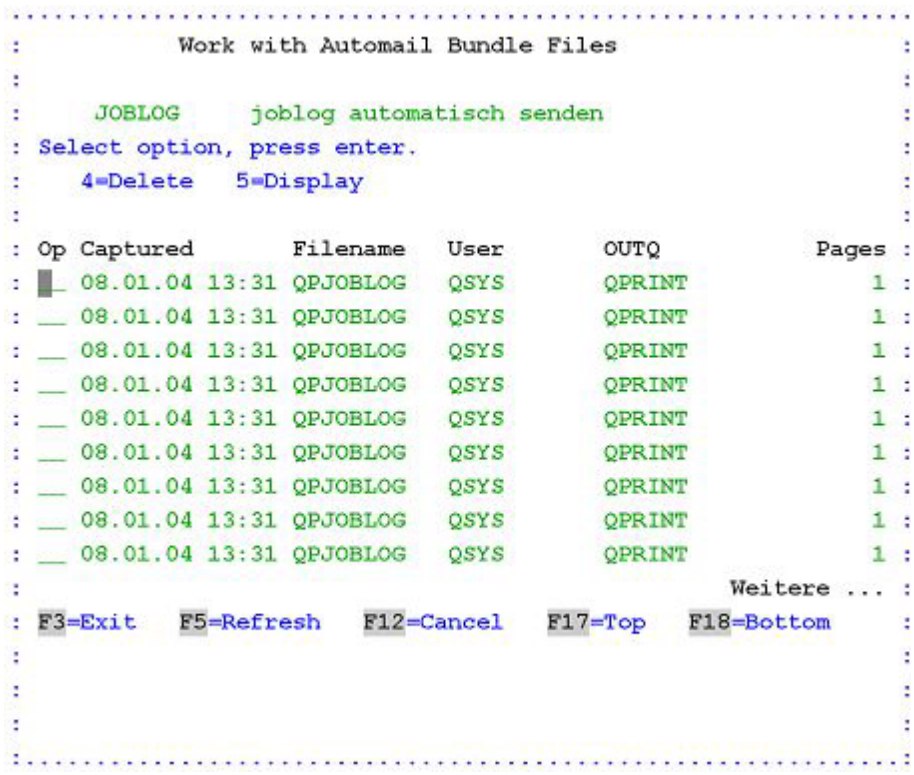
Options

4=Delete

With this option you can delete a spoolfile bundle. Only the information for the bundle is deleted. The bundle in PDF format created in the IFS continues.

5=Files

With this option you can display files and information about the bundle



0250 – Spool bundle files

13.0 Email APIs

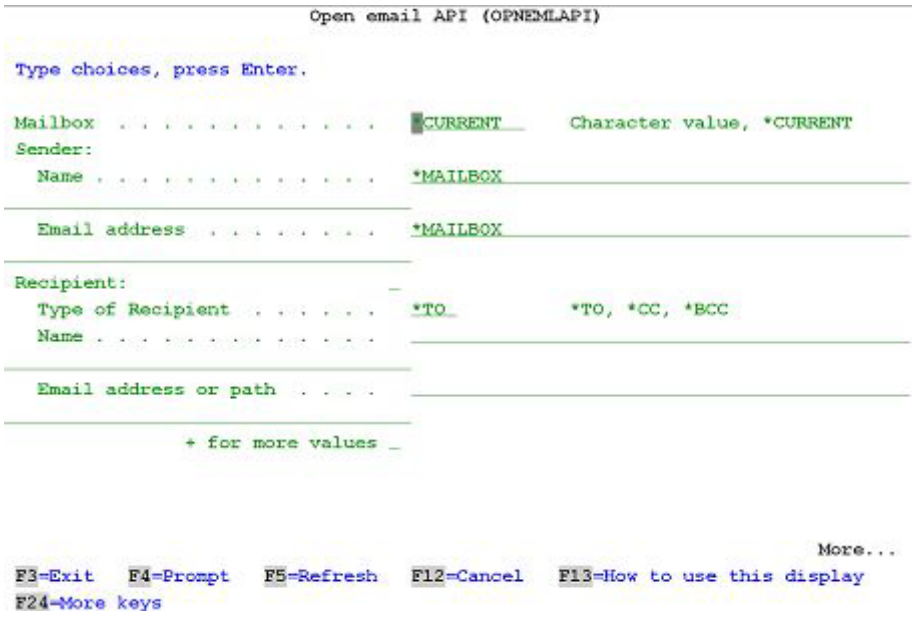
To offer you the possibility of integrating DirectMail perfectly into your applications, DirectMail provides several APIs (program interfaces) as well as commands, which you can use to create and send emails with simple iSeries commands and transmitted parameters.

13.1 Create and send emails automatically

The individual steps for automated email creation and dispatch are described in detail here.

13.1.1 Open email API (option 9)

The first API opens an email file. You begin creating an email with the command **OPNEMLAPI**.



0251 – Open email

Parameter names are shown in brackets in the following. For example, Receiver (RECEIVER).

Mailbox (MAILBOX)
Specify in which mailbox the email file should be opened.

Sender (SENDER)
Specify the names **and** email address(es) of the sender of the email. The format for the sender is:

SENDER(name 'email@address.de')

The values allowed are:

Sender's name and **email address**

***MAILBOX** The information is copied from the mailbox in the MAILBOX parameter.

Receiver (RECEIVER)

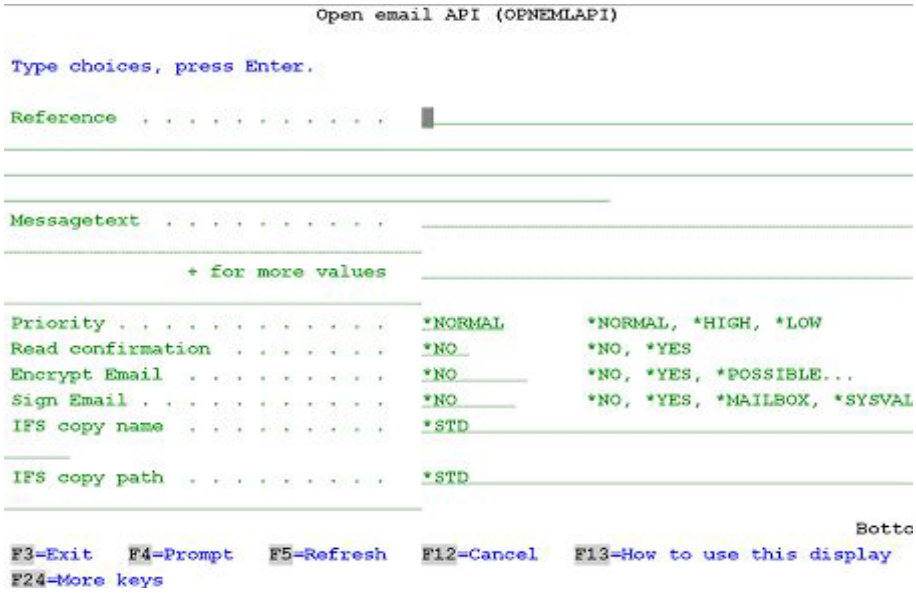
Provide here the names **and** email address(es) of the email receiver. The format for the receiver is:

RECEIVER((*TO name 'email@address.de') (*CC name 'email...'))

*TO specifies the receiver(s) who should receive the email as an original.

*CC specifies the receiver(s), who should receive the email as a copy.

*BCC specifies the receiver(s), who should receive the email as a "Blind copy". Other recipients do not see this copy.



0252 – Open email, page 2

Subject (SUBJECT)

The email's subject.

Message text (TEXT)

Here you can enter a message text for the email.

Priority (PTY)

Specifies the priority with which the email should be sent.

The values allowed are:

***HIGH** The email is sent with high priority

***NORMAL** The email is sent with normal priority

***LOW** The email is sent with low priority

Read confirmation (CONFIRM)

If the recipient's email program supports this function, you will receive confirmation that the recipient has opened the email.

The values allowed are:

***YES** The receiver is requested to deliver a confirmation

***NO** No confirmation is requested

Encrypt email

With this setting you specify whether the email should be encrypted Encryption can only be set to *YES if you possess the license DM400CRY.

The values allowed for this parameter are:

***NO** Emails are not encrypted

***YES** Emails are encrypted

***POSSIBLE** Encryption is allowed and is set with the individual mail transaction

***MAILBOX** The encryption setting for the mailbox is used

***SYSVAL** The encryption setting from the DirectMail configuration is used

Sign email

DirectMail also supports the digital signature of e-mails in order to ensure their authenticity. Signing can only be set to *YES if you possess the license DM400CRY.

The values allowed for this parameter are:

***NO** Emails are not signed

***YES** Emails are digitally signed.

***MAILBOX** The signature setting for the mailbox is used

***SYSVAL** The signature setting from the DirectMail configuration is used

IFS copy name (IFSBACKUP

The name with which the email should be filed in the IFS after being sent

IFS copy path (IFSPATH

The IFS directory in which the email should be filed after being sent.

0313- Open email, page 3

Parameter CCSID

Specifies the CCSID for the parameters passed to the command.

The values allowed for this parameter are:

Number CCSID table

***CURRENT** CCSID for the current job (default)

The parameters for email addresses, names, subject and text are automatically translated to the CCSID for the server job.

13.1.2 Output in email (option 10)

Once an email has been opened, any number of attachments can be inserted with the command **WRTEMLAPI**. These attachments can be from the iSeries Integrated File System, spoolfiles or iSeries objects like programs, files and libraries.

The following table shows all parameters for the command **WRTEMLAPI** and the objects they are used with:

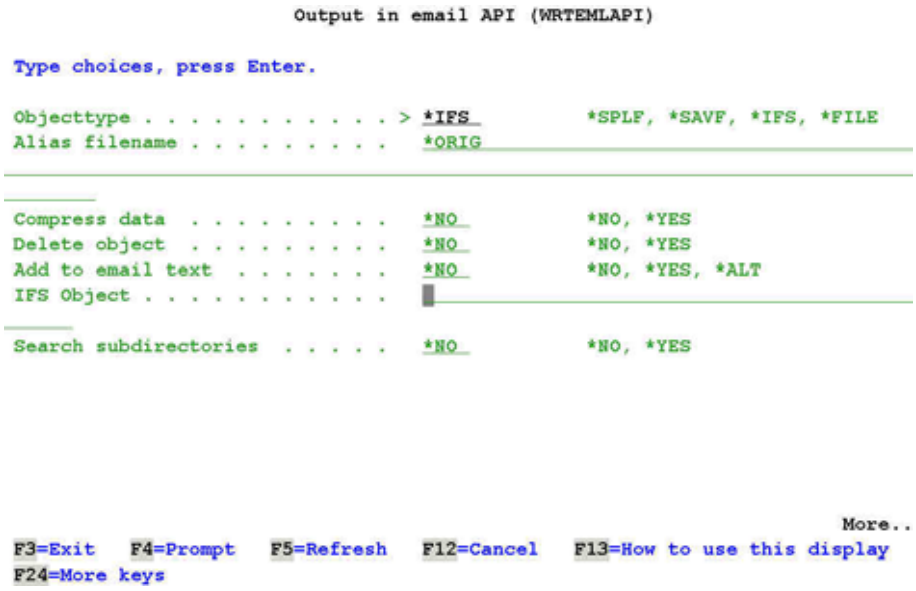
All parameters		***SPLF**	***SAVF**	***IFS**	***FILE**
Object type	TYPE	X	X	X	X
Alias filename	ALIAS	X	X	X	X
Compress data	COMPRESS	X	X	X	X
Delete object	DLT	X	X	X	X
Attach to email text	ADDTOTXT	X		X	X
Spool file	FILE	X			
Job name	JOB	X			
User		X			
Number		X			
Spool file number	SPLNBR	X			
Output format	FORMAT	X			

Spool-A-Matic format	GUMBOFMT	X		
Workstation customising object	WSCST	X		
Library		X		
Page range:	PAGERANGE	X		
Pages from251		X		
Pages to251		X		
Use text only	TEXTONLY	X		
Green bars	GREENBAR	X		
Page table	PAGETABLE	X		
Paper size	PAPERSIZE	X		
Landscape	ROTATION	X		
CPI	CPI	X		
LPI	LPI	X		
PDF font	FONT	X		
Codepage CCISD	CCSID	X		
Text original co-ordinates:	PDFAREA	X		
X axis mm		X		
X scale		X		
Y axis mm		X		
Y scale		X		
Form first page	OVERLAY	X		
Form position:	MARGINS	X		
Top margin mm		X		
Bottom margin mm		X		
Left margin mm		X		
Form continuation pages	OVERLAY2	X		
Form position:	MARGINS2	X		
Top margin mm		X		
Bottom margin mm		X		
Left margin mm		X		
PDF security settings:	PDFSEC	X		
Owner password		X		
User password		X		
Key length		X		
Allow print		X		
Allow change . . .		X		
Allow copy		X		
Allow annotations		X		
Allow form fields . .		X		
Allow access to content		X		
Allow assemble .		X		
High resolution Allow print . .		X		
CSV column separation	CSVTAB	X		
Present empty CSV lines . .	CSVSPCLIN	X		
Present CSV format error .	CSVNOFIT	X		
Present CSV header lines .	CSVHEAD	X		
IFS object	OBJ			X
Browse subfolders	SUBDIR			X
Search and replace:	SCNRPL			X
Search for				X
Replace with				X
Multiple occurrences				X

Data stream file CCISD	STMFCCSID		X	
Parameter CCSID	PARMCCSID		X	
Save file	SAVF	X		
Library		X		
File	DBFILE			X
Library				X
Member	DBMBR			X
Output format	DBOUTFMT			X
Add field description .	DBFLDDSC			X
Column separation with spaces	COLSEPSPC			X

13.1.2.1 Attach PC documents

PC documents are also accessible to the iSeries through the Integrated File System (IFS). DirectMail uses this function to access PC files.



0253 - Attach PC documents, page 1

Object type (TYPE)
Specify which type of object you want to attach, in this case ***IFS**.

Alias filename (ALIAS)
The name with which the file should be attached to the email. *ORIG stands for the original name of the file

Compress data (COMPRESS
Specify whether the file should be zipped before being sent. The file can then be unzipped by the recipient with a standard program like PKUNZIP, WINZIP, etc. DirectMail supports the GZIP format as a pack format

The values allowed are:

***YES** The file is packed before being attached to the email

***NO** The file is not packed before being attached to the email

Delete object (DLT)

Specify whether the file should be deleted after being attached.

The values allowed are:

***YES** The file is deleted after being attached to the email

***NO** The file is not deleted

Attach to email text (ADDTOTXT)

Specify whether the file should be sent as an attachment or as a text. If files exist in HTML format or if *HTML is specified as the conversion format, these files can be used as an alternative text. Email programs supporting HTML as an alternative text then display the HTML document instead of the text. The parameter **ADDTOTXT(*ALT)** also has to be specified with the command WRTEMLAPI.

The values allowed are:

***YES** The object content should be used as a text.

***NO** The object content should be used as an attachment.

***ALT** The object content should be used as alternative text. With some email programs this content is then displayed instead of the email text, e.g. to represent underlining etc.

IFS object (OBJ)

Enter the name and the directory for the IFS object that you want to attach. With the command WRTEMLAPI, multiple files can also be attached with one call. You can use generic searches, for example '*test*.pdf', 'test*.pdf', 'Article4711.*' or '/path/*'. Subdirectories can also be searched if the parameter SUBDIR is set to *YES.

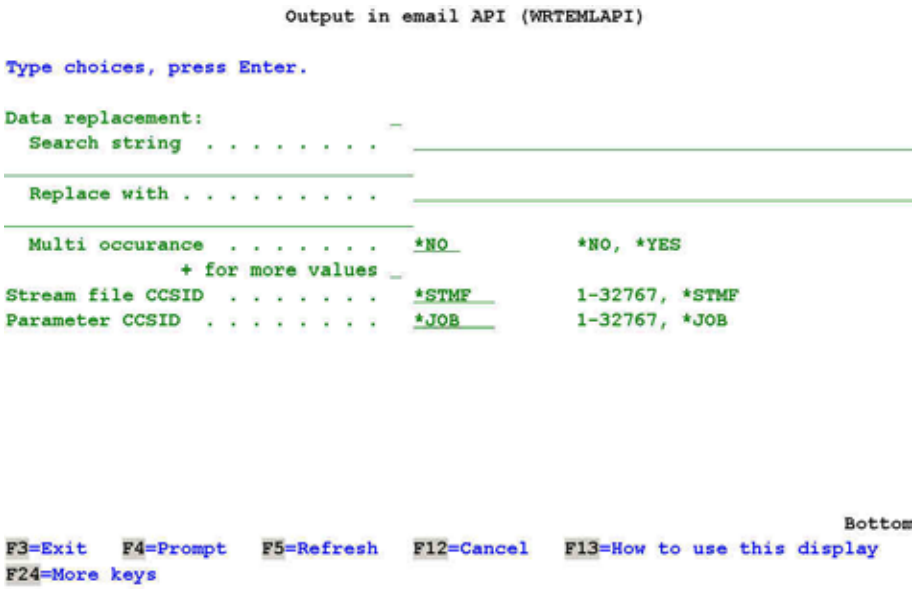
Browse subfolders (SUBDIR)

You can also search subfolders.

The values allowed are:

***YES** Subfolders are included in the search.

***NO** Subfolders are not included in the search.



0320 – Attach PC documents, page 2

Search and replace (SCNRPL)

Allows you to search and replace within an attachment.

Search string Search string

Replace with Replacement string

Multi occurrence
Specify whether there are multiple occurrences of the search string on the page.

The values allowed are:

***NO** Search string occurs only once (default)

***YES** Search string may occur more than once

Data stream file CCISD (STMFCCSID)

The values allowed are:

***STMF** (default)

Number 1 – 32767

Parameter CCSID (PARAMCCSID)

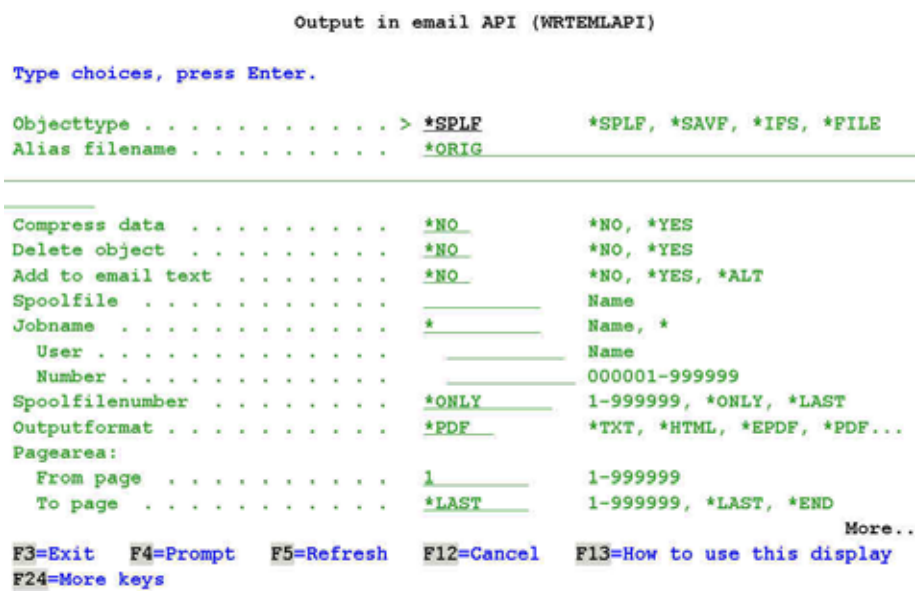
The values allowed are:

***JOB** (default)

Number 1 – 32767

13.1.2.2 Attach spoolfile

With **WRTEMLAPI**, you can program attachment of spoolfiles to emails.



0254 - Attach spoolfile, page 1

Object type (TYPE)

Specify which type of object you want to attach, in this case ***SPLF**.

Alias filename (ALIAS)

The name with which the file should be attached to the email. *ORIG stands for the original name of the file

Compress data (COMPRESS

Specify whether the file should be zipped before being sent. The file can then be unzipped by the recipient with a standard program like PKUNZIP, WINZIP, etc. DirectMail supports the GZIP format as a pack format

The values allowed are:

***YES** The file is packed before being attached to the email

***NO** The file is not packed before being attached to the email

Delete object (DLT)

Specify whether the file should be deleted after being attached.

The values allowed are:

***YES** The file is deleted after being attached to the email

***NO** The file is not deleted

Attach to email text (ADDTOTXT)

Specify whether the file should be sent as an attachment or as a text. If files exist in HTML format or if *HTML is specified as the conversion format, these files can be used as an alternative text. Email programs supporting HTML as an alternative text then display the HTML document instead of the text. The parameter **ADDTOTXT(*ALT)** also has to be specified with the command WRTEMLAPI.

The values allowed are:

***YES** The object content should be used as a text.

***NO** The object content should be used as an attachment.

***ALT** The object content should be used as alternative text. With some email programs this content is then displayed instead of the email text, e.g. to represent underlining etc.

Spool file (FILE)
The name of the spoolfile to be attached.

Job name, User, Number (JOB)
The job information for the spoolfile (can be displayed with the iSeries command WRKSPLF.)

Spool file number (SPLNBR)
The spool sequence number for the job.

Output format (FORMAT)
Specify in which format the spoolfile should be attached to the email.

The values allowed are:

***TXT** The spoolfile is converted to ASCII text and attached.

***CSV** The spoolfile is converted to semicolon-delimited text and attached.

***HTML** The spoolfile is converted into an HTML document and attached.

***PDF** The spoolfile is converted to PDF format (read with Acrobat Reader) and attached.

***EPDF** Adobe's PDF file format, but in the Enhanced Version of DirectView PDF. This format supports elements such as form overlays, allowing you to use background JPG or TIF files with the spool to create complete printed forms.

***ORIG** The email recipient works with DirectMail and can view the spoolfile in iSeries format.

***TIFF** The spoolfile is converted into a TIFF graphic and attached.

***GUMBO** The spoolfile is converted by Gumbo SPLAMATIC and attached.

***RAW** Copies the pure data stream to a PC file (used for PCL and AFP).

***PCL** PCL is used for page descriptions.

***HPT** The spoolfile is converted into an HPT document and attached.

Page range from-to (PAGERANGE)
Allows you to select a page range for the spoolfile to be attached.

The values allowed are:

Page number 0 - 999999

***LAST** Attach up to the last page number

***END** Attach up to the last page number

Green bars (GREENBAR) – with HTML format
Specify whether the lines in the HTML format should be separated by white/green bars (giving the effect of a print on paper stock).

Page table (PAGETABLE)
With documents containing multiple pages, a page table is inserted in the HTML format at the beginning of the document, ensuring better navigation.

The following parameters are also available when attaching spoolfiles.

Spool-A-Matic format (GUMBOFMT)

Workstation customising object (WSCST), Library
With conversion using host-print-transform, you can insert a workstation customising object which will be used when converting the printer data stream.

Use text only (TEXTONLY)
If this parameter is set to "*YES", only the text will be used from the spooled file, no graphics or other elements.

Paper size (PAPERSIZE)
Specifies the default value of the paper size for the conversion of spoolfiles into PDF format. The values allowed can be displayed using F4.

Landscape (ROTATION)
Specify whether the form should be rotated to landscape format. This setting is only available with *EPDF format.

The values allowed are:

***SPLF** The value for the spoolfile page rotation is used

***YES** The form is in landscape format

***NO** The form is not in landscape format

***AUTO** The form is automatically rotated so that the margins are not crossed.

CPI (CPI)
Here you can set individual text widths in CPI (characters per inch) differing from the spoolfile.

The values allowed are:

Number A valid CPI setting (e.g. 5,8,10,12,15,16,7...)

0 The spoolfile CPI value is used

LPI (LPI)

Here you can set individual text heights in LPI (lines per inch) differing from the spoolfile.

The values allowed are:

Number A valid LPI setting (e.g. 5,8,10,12,15,16,7...)

0 The spoolfile LPI value is used

PDF version (FONT)

Specifies the version for opening files using Acrobat Reader. It is important to ensure that PDF forms are created with the PDF version set here, or a previous version.

The values allowed are:

1.3 Acrobat 4
1.4 Acrobat 5
1.5 Acrobat 6
1.6 Acrobat 7

Codepage CCSID (CCSID)

When using Unicode conversion, specify the CCSID to ensure that characters are properly displayed in PDF format.

Text original co-ordinates (PDFAREA)

X axis mm

Allows you to move the original spool text right (values in mm). Negative values shift the text left.

X scale

Type in the scaling factor for the original spool text.

The values allowed are:

Number – A percentage of the original size (for example 90 = 90%, 120 = 120%)

***NO** – Do not scale

***YES/*FIT** – Scale to page-size – keeps the spool text within the page margins.

Y axis mm

Allows you to move the original spool text down (values in mm). Negative values shift the text up.

Y scale

Type in the scaling factor for the original spool text.

The values allowed are:

Number – A percentage of the original size (for example 90 = 90%, 120 = 120%)

***NO** – Do not scale

***YES/*FIT** – Scale to page-size – keeps the spool text within the page margins.

Form first page (OVERLAY)
Enter the name of a form to be added to the PDF file. The file must be in the FORMS directory of DirectMail400. This setting is only allowed when using *EPDF format.

Form position (MARGINS)
Enter the margins so that the graphic can be aligned as required.

Form continuation pages (OVERLAY2)
Specify the form for continuation pages.

The values allowed are:

***FIRSTPAGE** Continuation pages same as first page

***NONE** No form

Form position (MARGINS2)
Enter the margins so that the graphic on continuation pages can be aligned as required.

PDF security settings (PDFSEC)
Specify the settings for PDF files sent encrypted. The parameters are described below in the section on the command CRTSECPDF.

CSV column separation (CSVTAB)
Controls column separation.

The values allowed are:

1-200 Number of columns

***NONE** No column separation

***AUTO** **No automatic column separation**

Present empty CSV lines (CSVSPCLIN)
Controls the presentation of empty lines.

The values allowed are:

***YES** Do not delete empty lines

***NO** Delete empty lines

Present CSV format error (CSVNOFIT)
Controls the display in case of format errors.

The values allowed are:

***YES** All lines are presented

***NO** Lines that do not fit with the CSV-scheme will be deleted

Present CSV header lines (CSVHEAD)
Controls the display of header lines.

The values allowed are:

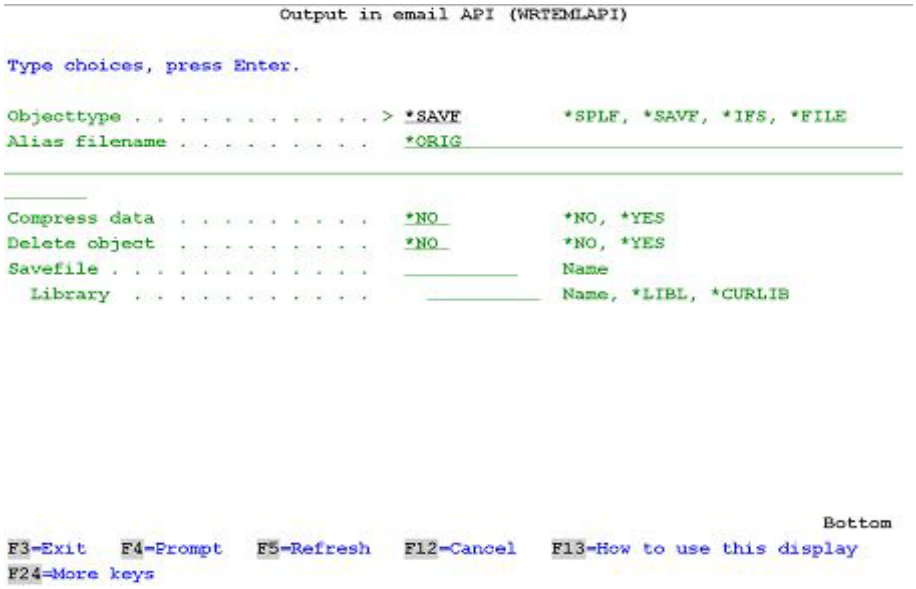
***YES** Header lines will be presented

***NO** Lines that are identified as header lines will be deleted

Note: Best results using CSVSPCLIN=*NO and CSVNOFIT=*NO

13.1.2.3 Attach savefile (Savefile)

With DirectMail you can also automatically send iSeries objects which have been saved in savefiles by **WRTEMLAPI**.



0257 - Attach savefile

Object type (TYPE)
Specify the attachment object type. In this case it is ***SAVF**

Alias filename (ALIAS)
The name with which the savefile should be attached to the email. ***ORIG** stands for original name of file

Compress data (COMPRESS
Specify whether the file should be zipped before being sent. The file can then be unzipped by the recipient with a standard program like PKUNZIP, WINZIP, etc. DirectMail supports the GZIP format as a pack format

The values allowed are:

***YES** The file is packed before being attached to the email

***NO** The file is not packed before being attached to the email

Delete object (DLT)
Specify whether the savefile should be deleted after being attached.

The values allowed are:

***YES** The savefile is deleted after being attached to the email

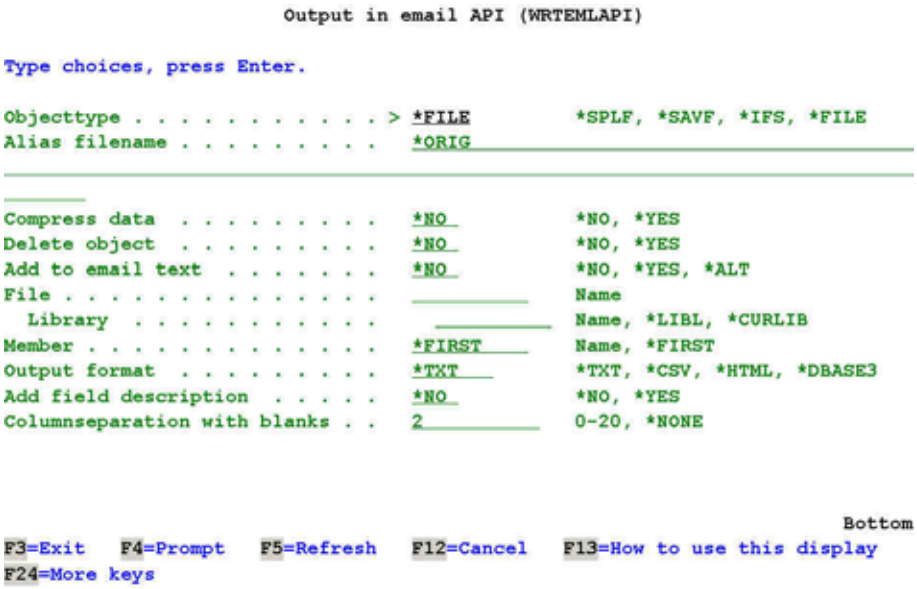
***NO** The savefile is not deleted

Savefile (SAVF)
Specify the name of the savefile.

Library
Specify the name of the library for the savefile.

13.1.2.4 Attach iSeries database file

With DirectMail, you can also attach iSeries database files either as an attachment or as part of the email text.



0258 - Attach database file

Object type (TYPE)
In this case ***FILE**.

Alias filename (ALIAS)
The name with which the file should be attached to the email. ***ORIG** stands for original name of file.

Compress data (COMPRESS
Specify whether the file should be zipped before being sent. The file can then be unzipped by the recipient with a standard program like PKUNZIP, WINZIP, etc. DirectMail supports the GZIP format as a pack format

The values allowed are:

***YES** The file is packed before being attached to the email

***NO** The file is not packed before being attached to the email

Delete object (DLT)
Specify whether the file should be deleted after being attached.

The values allowed are:

***YES** The spoolfile is deleted after being attached to the email

***NO** The spoolfile is not deleted

Attach to email text (ADDTOTXT)
Specify whether the file should be sent as an attachment or as a text.

The values allowed are:

***YES** The object content should be used as a text.

***NO** The object content should not be used as a text (default).

***ALT** The object content should be used as alternative text. With some email programs this content is then displayed instead of the email text, e.g. to represent underlining etc.

File/Library (DBFILE)
Enter the name and the library for the iSeries database file you want to attach.

Member (DBMBR)
Specify the name of the member you want to attach.

The values allowed are:

***FIRST** The first member in the database is attached

Name The member matching the specified name is attached

Output format (DBOUTFMT)
The file to be attached can be converted into a range of file formats.

The values allowed are:

***TXT** The file is converted to **TXT** format. More or less all editors can read this file format.

***CSV** The file is converted to **CSV** format. This format delimits the fields with semicolons and is ideal for further processing with spreadsheet programs like Microsoft Excel.

***HTML** The file is converted to HTML format.

***DBASE3** The file is converted to DBASE3 format.

Add field description (DBFLDDSC)
Specify whether the field names should be included.

The values allowed are:

***YES** The field descriptions are added

***NO** The field descriptions are not added

Column separation with spaces (COLSEPSPC)
Specify the column width between fields when converting to *TXT format.

The values allowed are:

0-20 The number of columns between fields

***NONE** No column separation (default)

13.1.3 Close email API (option 11)

To close and send an email, use the command **CLSEMLAPI**.

0259 – Close and send email

Send email (SEND)
Close the email file and send the email.

The values allowed are:

***EDIT** starts editor for further editing after closing the email.

***YES** Sends the email.

***NO** Saves the email in the mailbox that was specified when being opened.

***HOLD** The created email is put in the inbox with the status HLD

Schedule time (SCDTIME)
Schedule date (SCDDATE)
If you want to send an email at a specific date/time, enter it here. Otherwise the email will be sent as soon as possible.

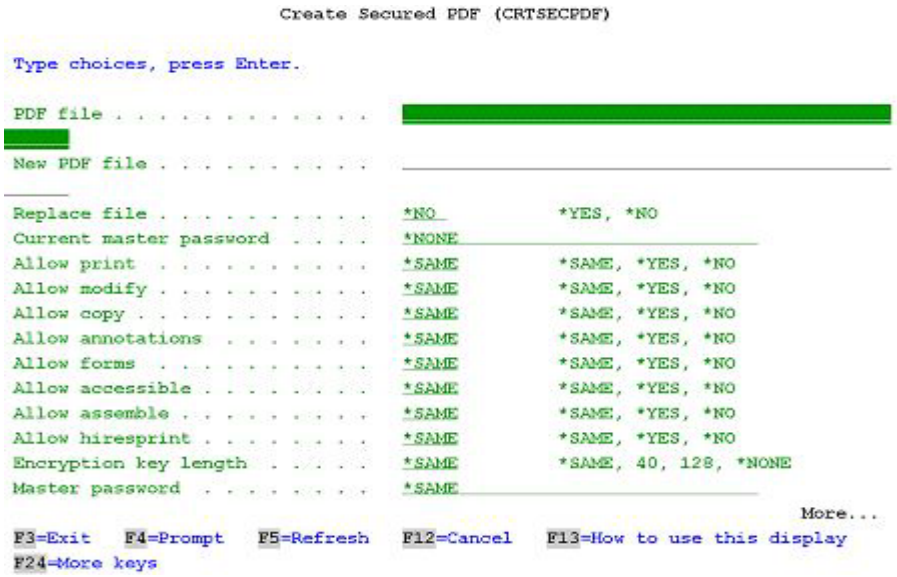
13.2 Additional DirectMail commands

Additional DirectMail commands are described hereafter.

13.2.1 Command CRTSECPDF

This command is used to encrypt PDF files that are sent by email. It allows you to protect confidential documents so that only recipients with password data can open them. Up to 128-bit encryption is supported. Certificates are not supported with this type of encryption.

Note:
Even 128-bit encryption is only as secure as the password itself. Use a password as long as possible with mixed characters and digits.



0260 - Encrypt PDF file

PDF file
Specify a folder and name for the unencrypted PDF file.

New PDF file
Specify the folder and name for the encrypted PDF file.

Replace file
If the file already exists, it can be replaced.

The values allowed are:

***YES** Overwrite the file if a file with the same name exists

***NO** Do not overwrite the file

Current owner password
The currently owner password for the file. This is required if the file is already protected by a password in order to change the following attributes.

Allow print
Specify whether the recipient may print the file.

The values allowed are:

***YES** The file may be printed.

***NO** The file may not be printed.

***SAME** The attribute is not changed.

Allow change
Specify whether the recipient may modify the file with Adobe Acrobat.

The values allowed are:

***YES** The file may be modified.

***NO** The file may not be modified.

***SAME** The attribute is not changed.

Allow copy

Specify whether the recipient may copy the contents of the file by cutting and pasting (Screenreader).

The values allowed are:

***YES** The file may be copied.

***NO** The file may not be copied.

***SAME** The attribute is not changed.

Allow comments

Specify whether the recipient may add or change annotations with Adobe Acrobat.

The values allowed are:

***YES** Annotations may be added.

***NO** Annotations may not be added.

***SAME** The attribute is not changed.

Allow form fields

Specify whether the recipient may add or change form fields with Adobe Acrobat.

The values allowed are:

***YES** Form fields may be added.

***NO** Form fields may not be added.

***SAME** The attribute is not changed.

Allow access to contents

Specify whether the recipient may access the content of the PDF file with, for example, Screenreader (from Acrobat Version 5).

The values allowed are:

***YES** Content may be accessed.

***NO** Content may not be accessed.

***SAME** The attribute is not changed.

Allow assemble

Specify whether the recipient may add, delete or rotate pages with Adobe Acrobat or whether thumbnails and bookmarks may be added.

The values allowed are:

***YES** Assemble is allowed.

***NO** Assemble is not allowed.

***SAME** The attribute is not changed.

Allow high resolution print

Specify whether high-resolution printing is allowed for the PDF file, or if the recipient is restricted to low-resolution dot matrix printing.

The values allowed are:

***YES** The PDF file may be printed with high-resolution.

***NO** The PDF file may not be printed with high-resolution.

***SAME** The attribute is not changed.

Key length

Specify the key length used for encrypting the PDF file.

The values allowed are:

40 A 40-digit key length is used.

128 A 128-digit key length is used.

***NONE** The file is not encrypted.

***SAME** The attribute is not changed.

Owner-password

Here you can specify a new password for the owner of the PDF document. An owner password is required to change the PDF file attributes.

The values allowed are:

Name Any password

***NONE** The file is not protected by a password.

User password

Here you can specify a user password with which the PDF file may be opened and edited within the limitations defined by the owner.

Note:

You will be prompted for the user password when opening the PDF file. This provides an additional protection against unauthorised access.

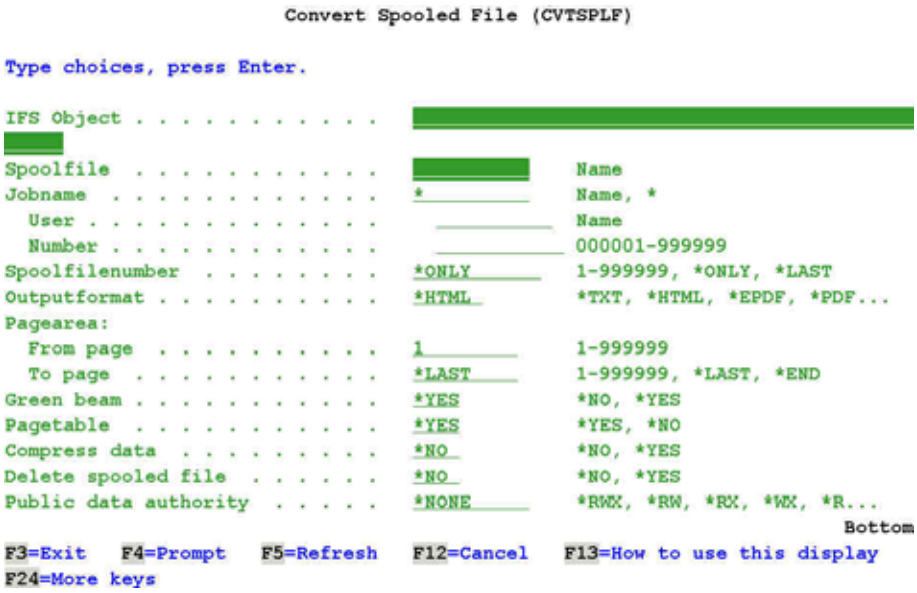
The values allowed are:

Name Any password

***NONE** The file is not protected by a password.

13.2.2 Command CVTSPLF

Using the command CVTSPLF you can convert a spoolfile into a document in the iSeries Integrated File System (IFS) regardless of the other DirectMail functions.



0261 – Convert spoolfile

IFS object (OBJ)
Enter the directory and name under which the converted spoolfile should be saved.

Spool file (FILE)
The name of the spoolfile to be attached.

Job name, User, Number (JOB)
The job information for the spoolfile (can be displayed with the iSeries command WRKSPLF.)

Spool file number (SPLNBR)
The spool sequence number for the job.

Output format (FORMAT)
Specify in which format the spoolfile should be attached to the email.

The values allowed are:

***CSV** The spoolfile is converted to semicolon-delimited text and attached.

***TXT** The spoolfile is converted to ASCII text and attached.

***HTML** The spoolfile is converted into an HTML document and attached.

***PDF** The spoolfile is converted to PDF format (read with Acrobat Reader) and attached.

***EPDF** Adobe's PDF file format, but in the Enhanced Version of DirectView PDF. This format supports elements such as form overlays, allowing you to use background JPG or TIF files with the spool to create complete printed forms.

***TIFF** The spoolfile is converted into a TIFF graphic and attached.

***ORIG** The email recipient works with DirectMail and can view the spoolfile in iSeries format.

***GUMBO** The spoolfile is converted by Gumbo SPLAMATIC and attached.

***RAW** Copies the pure data stream to a PC file (used for PCL and AFP).

***PCL** PCL is used for page descriptions.

***HPT** The spoolfile is converted into an HPT document and attached.

Page range from-to (PAGERANGE)

Allows you to select a page range for the spoolfile to be attached.

The values allowed are:

Page number

***LAST** Attach up to the last page number

***END** Attach up to the last page number

Green bars (GREENBAR) – with HTML format

Specify whether the lines in the HTML format should be separated by white/green bars (giving the effect of a print on paper stock).

Page table (PAGETABLE)

With documents containing multiple pages, a page table is inserted in the HTML format at the beginning of the document, ensuring better navigation.

Compress data (COMPRESS

Specify whether the file should be zipped before being sent. The file can then be unzipped by the recipient with a standard program like PKUNZIP, WINZIP, etc. DirectMail supports the GZIP format as a pack format

The values allowed are:

***YES** The file is packed before being attached to the email

***NO** The file is not packed before being attached to the email

Delete spoolfile (DLT)

Specify whether the spoolfile should be deleted after being converted.

The values allowed are:

***YES** The spoolfile is deleted after being converted

***NO** The spoolfile is not deleted

Public data authority (DTAAUT)

Specify the authority with which the object should be protected in the IFS.

The values allowed are:

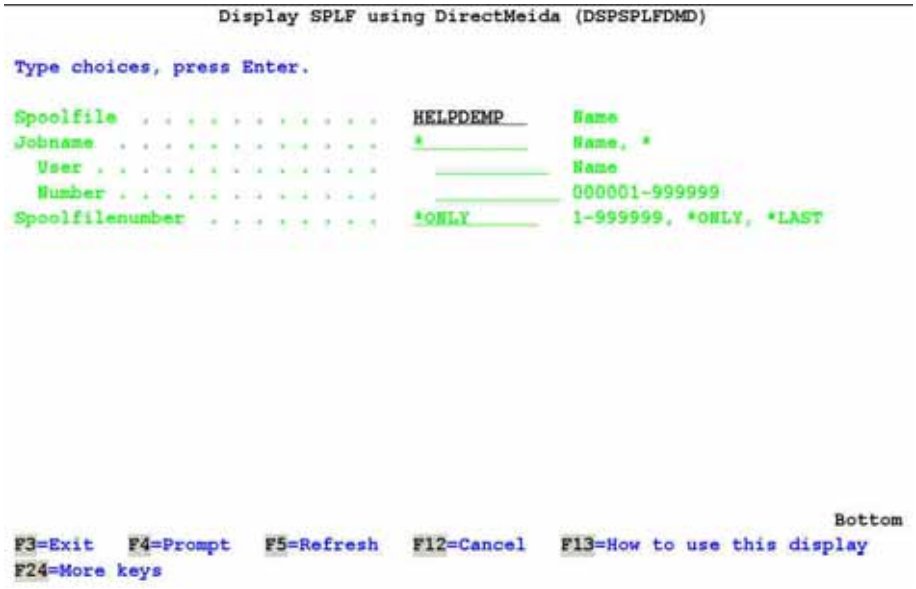
***NONE** The object is created without any object authority.

Authority The object is created with the specified authorities (*RWX, *RW, *RX, *WX, *R, *W, *X).

***EXCLUDE** No user has access to the object.

13.2.3 Command DSPSPLFDMD

You can use the command DSPSPLFDMD to display a spoolfile with DirectMedia.



0323 – Display spool with DirectMedia

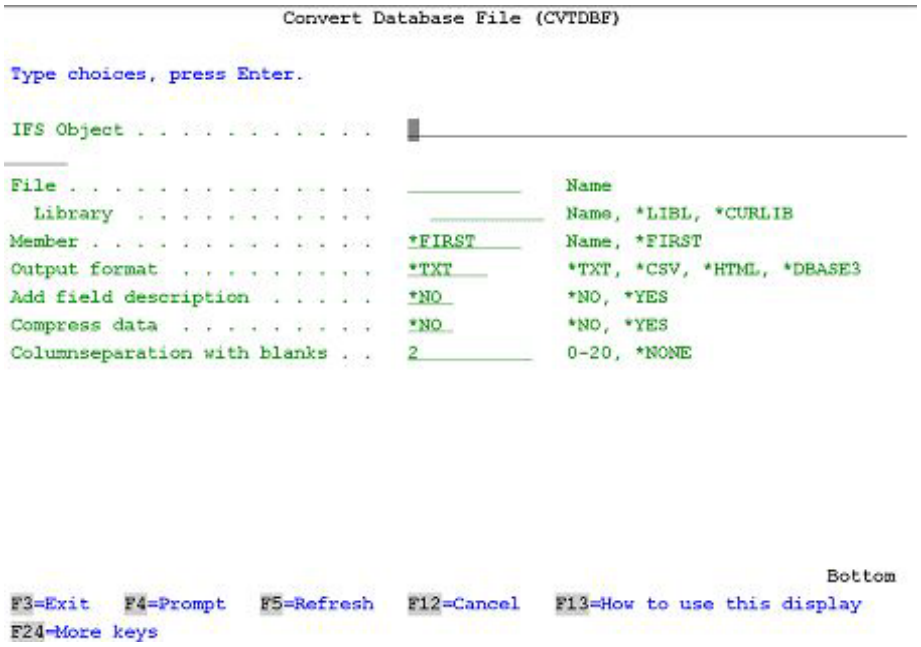
Spool file (FILE)
Specify the name of the spoolfile.

Job name, User, Number (JOB)
The job information for the spoolfile (can be displayed with the iSeries command WRKSPLF.)

Spool file number (SPLNBR)
The spool sequence number for the job.

13.2.4 Command CVTDBF

Using the CVTDBF command, iSeries databases can be converted into CSV, TXT, HTML or DBASE3 format.



0265 – Convert database

IFS object (OBJ)
Enter the directory and name under which the converted spoolfile should be saved in the IFS.

File/Library (DBFILE)
Enter the name and the library for the iSeries database file you want to attach.

Member (DBMBR)
Specify the name of the member you want to attach.

The values allowed are:

***FIRST** The first member in the database is attached

Name The member matching the specified name is attached

Output format
The file can be converted into a range of file formats.

The values allowed are:

***TXT** The file is converted to **TXT** format. More or less all editors can read this file format.

***CSV** The file is converted to **CSV** format. This format delimits the fields with semicolons and is ideal for further processing with spreadsheet programs like Microsoft Excel.

***HTML** The file is converted to HTML format.

***DBASE3** The file is converted to DBASE3 format.

Add field description (DBFLDDSC)
Specify whether the field names should be included.

The values allowed are:

***YES** The field descriptions are added

***NO** The field descriptions are not added

Compress data (COMPRESS

Specify whether the file should be zipped before being sent. The file can then be unzipped by the recipient with a standard program like PKUNZIP, WINZIP, etc. DirectMail supports the GZIP format as a pack format

The values allowed are:

***YES** The file is packed before being attached to the email

***NO** The file is not packed before being attached to the email

Column separation with spaces

Specify the column width between fields when converting to *TXT format.

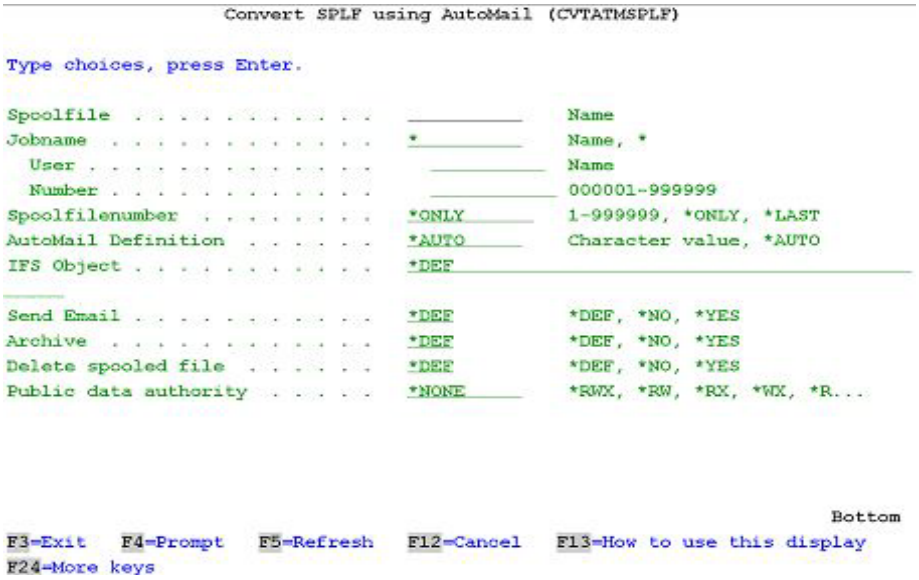
The values allowed are:

0-20 The number of columns between fields

***NONE** No column separation (default)

13.2.5 Command CVTATMSPLF

Using the command CVTATMSPLF, spoolfiles can be converted using an AutoMail definition. The AutoMail monitor is not required.



0266 – Convert SPFL using AutoMail

Spool file (FILE)

The name of the spoolfile to be attached.

Job name, User, Number (JOB)

The job information for the spoolfile (can be displayed with the iSeries command WRKSPLF.)

Spool file number (SPLNBR)
The spool sequence number for the job.

AutoMail definition
Specify the AutoMail with which you want to process the spoolfile.

The values allowed are:

***AUTO** The AutoMail definition matching the filter criteria is used.

Character value The AutoMail definition specified here is used.

IFS object
Enter the directory and name under which the converted spoolfile should be saved.

Normally, only one IFS path is specified. The command saves the converted file to that path. Because some AutoMail definitions break spoolfiles into multiple PC files, the names of the PC files are generated automatically.

If an IFS path and a file name are specified in the OBJ parameter, this name (without .xxx extension) must end with a * (asterisk).

Example: /DirectMail400/Test*

Then the first (and maybe the only) converted PC file is created in the IFS directory as “Test.xxx“ (xxx is the respective extension). If a split of the spoolfile into several PC files results from the AutoMail definition, the name of the second file and all the following names are generated automatically according to the pattern ATM#xx#y, where xx and y being numbers.

Send email
Specify whether the spoolfile is sent after being converted.

The values allowed are:

***YES** The file is sent by email after being converted.

***NO** The file is not sent by email after being converted.

***DEF** The AutoMail definition determines whether the file is sent or not after conversion.

Archive
Specify whether the spoolfile is archived after being converted.

The values allowed are:

***YES** The file is archived after being converted.

***NO** The file is not archived after being converted.

***DEF** The AutoMail definition determines whether the file is archived or not after conversion.

Delete spoolfile (DLT)
Specify whether the spoolfile should be deleted after being converted.

The values allowed are:

***YES** The spoolfile is deleted after being converted

***NO** The spoolfile is not deleted

Public data authority (DTAAUT)
Specify the authority with which the object should be protected in the IFS.

The values allowed are:

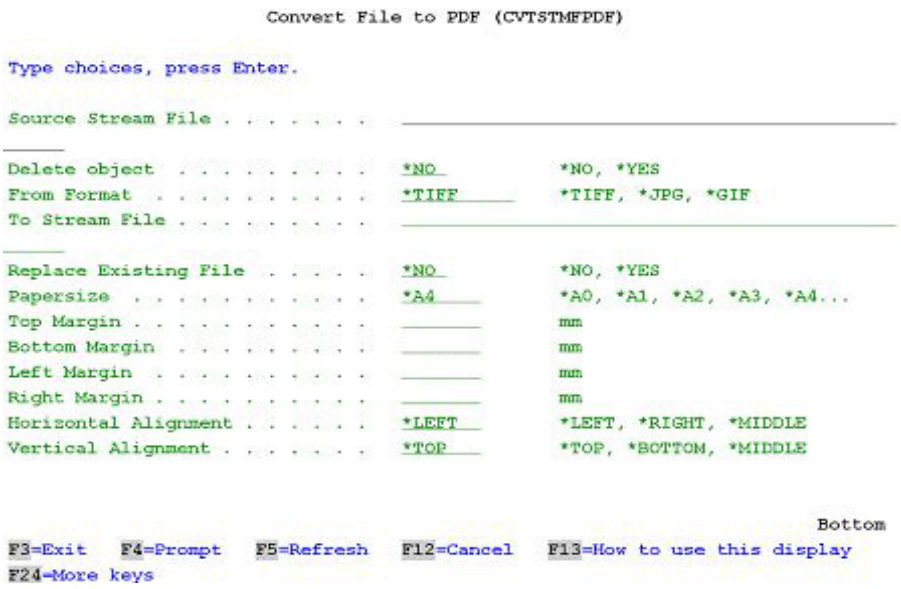
***NONE** The object is created without any object authority.

Authority The object is created with the specified authorities (*RWX, *RW, *RX, *WX, *R, *W, *X).

***EXCLUDE** No user has access to the object.

13.2.6 Command CVTSTMFPDF

Using the command CVTSTMFPDF, source stream files in the formats TIF, JPG and GIF can be converted to PDF.



0267 – Convert file to PDF

From source stream file
Specify the name of the source stream file with the full path.

Delete object
Specify whether the file should be deleted after being converted.

The values allowed are:

***YES** The file is deleted after being converted to PDF

***NO** The file is not deleted

From format
Specify the format of the file to be converted.

The values allowed are:

***TIFF** The file is in TIFF format.

***JPG** The file is in JPG format.

***GIF** The file is in GIF format.

To source stream file
Specify the name of the source stream file along with the full path for the converted file.

Replace existing file
Specify whether any existing file is overwritten in the IFS

The values allowed are:

***YES** Existing file is overwritten

***NO** Existing file is not overwritten

Paper size
Specify the paper size for the PDF file

The values allowed are:

A0 to A6 DIN (German industry norm) formats

B5 DIN (German industry norm) format

LEDGER, LEGAL, LETTER, P11*17 Other formats

***ORIG** The original paper size is used.

Top, bottom, left, right margin
Allows you to specify the margin settings in millimetres.

Horizontal alignment
Sets the horizontal alignment of the graphic in the PDF document.

The values allowed are:

***LEFT** Aligned to the left margin

***RIGHT** Aligned to the right margin

***MIDDLE** Centred

Vertical alignment
Sets the vertical alignment of the graphic in the PDF document.

The values allowed are:

***TOP** Aligned to the top margin

***BOTTOM** Aligned to the bottom margin

***MIDDLE** Centred

13.2.7 Command DLTATMBCH

Using the command DLTATMBCH (Delete AutoMail batch) a complete batch can be deleted from AutoMail.

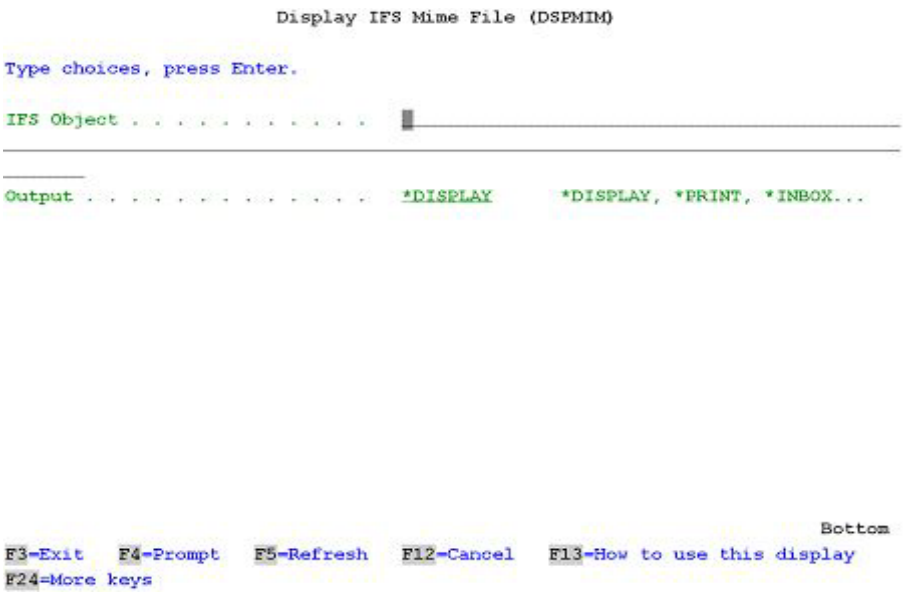
0268 – Delete AutoMail batch

Batch ID
The unique batch ID must be specified as a parameter. This ID can be determined using option **5** in the mailbox.

13.2.8 Command DSPMIM

Using the command DSPMIM, you can access Mime files which have been saved in the IFS from the iSeries. Text files are shown. If attachments have been saved, they can be exported. If the command DSPMIM is called with *INBOX, the mail ID created is filed in the data area QTEMP/DMTMPMID . If an error occurs, the mail ID is empty.

This command facilitates the integration of DirectMail into custom applications.



0269 – The command DSPMIM

IFS object
Specify the name of the IFS object with the full path.

Output
Specify how the Mime file should be handled.

The values allowed are:

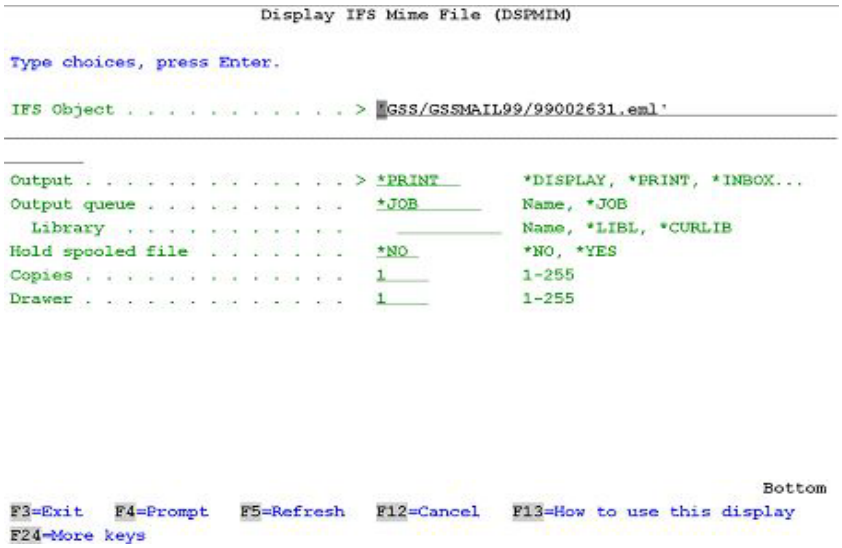
***DISPLAY** The IFS object is displayed

***PRINT** The IFS object is printed

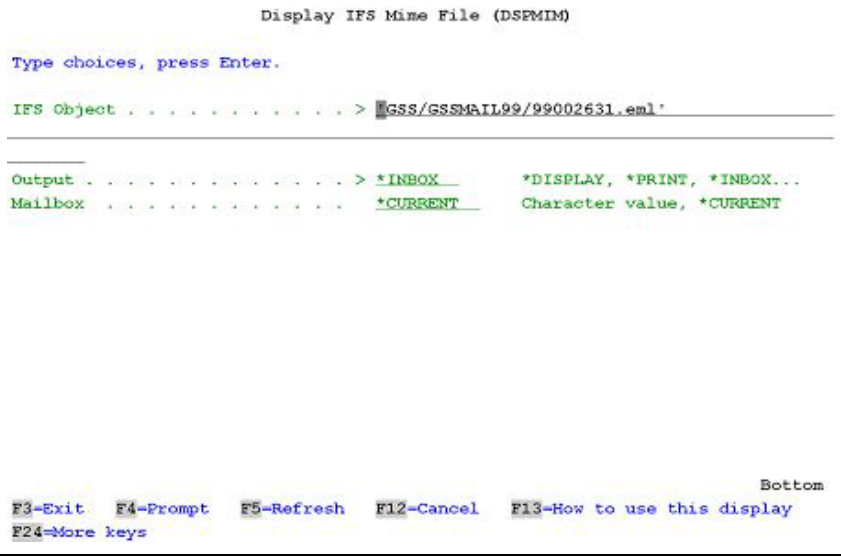
***INBOX** The IFS object is sent to a mailbox inbox

***ATTACH** Calls "Work with Attachments"

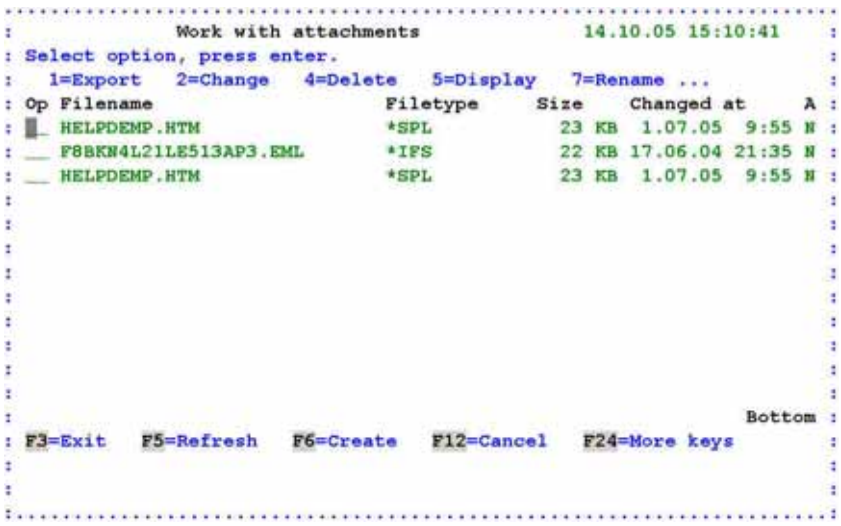
*0270 – Display Mime file with *DISPLAY*



*0271 – Print Mime file with *PRINT*



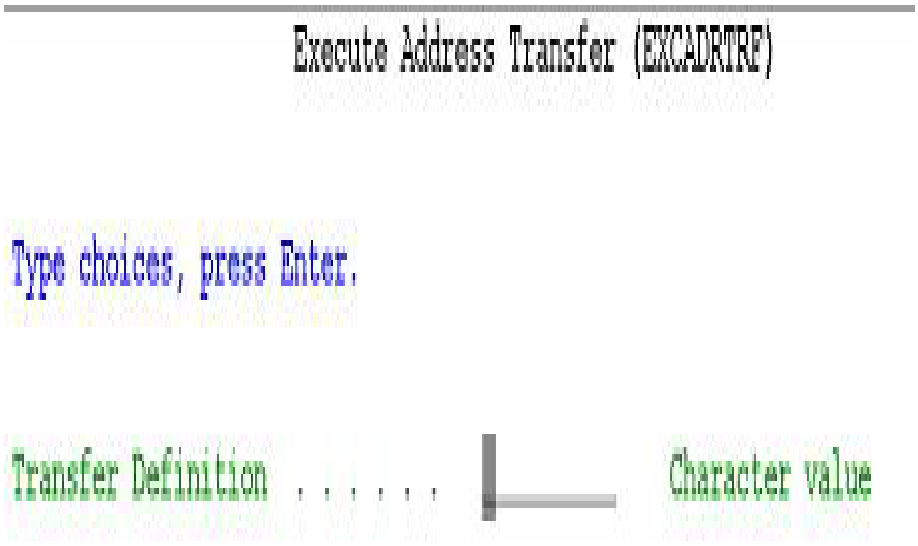
0272 – Transfer the Mime file to the current user's mailbox



0273 – Display Mime file attachments

13.2.9 Command EXCADRTRF

Using the command EXCADRTRF, you can execute the requests saved in transfer definitions and transfer your address files into the DirectMail address database.

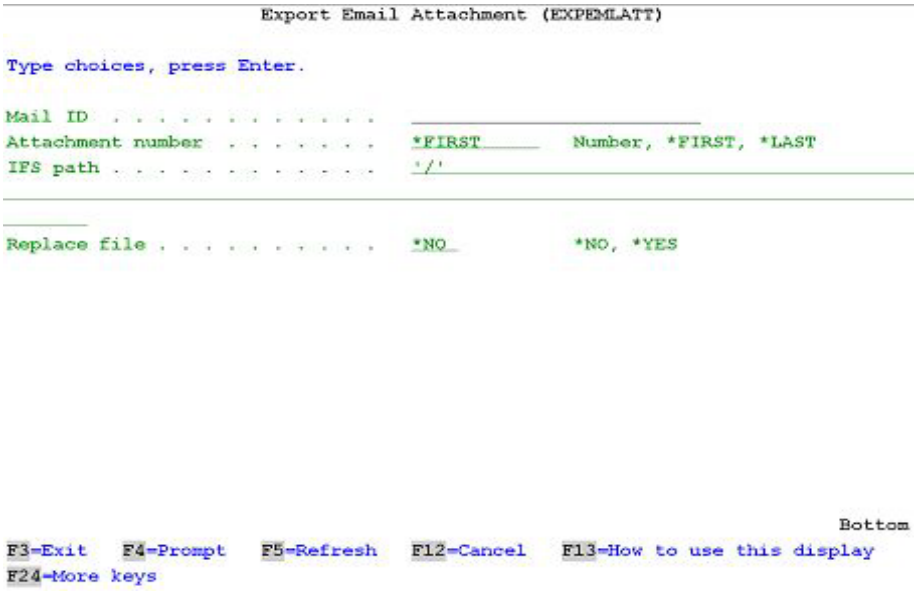


0274 - Transfer address

Enter the name of the saved transfer definition you want to execute.

13.2.10 Command EXPEMLATT

Using the command EXPEMLATT, you can export the attachments from a received email without having to open the email beforehand.



0275 - Export email attachment

Mail ID
Enter the 20-character mail ID that identifies every email uniquely. You get the 20-character mail ID automatically from the Incoming Mail Assistant using the function ***EXITPGM** among others.

Attachment number
Identify the number of the attachment that you want to export.

The values allowed are:

***FIRST** The first attachment is exported

***LAST** The last attachment is exported

NUMBER The attachment with the listed number is exported.

IFS path
Enter the IFS path in which the attachment should be saved.

Replace object
Specify whether any existing document in the IFS is overwritten

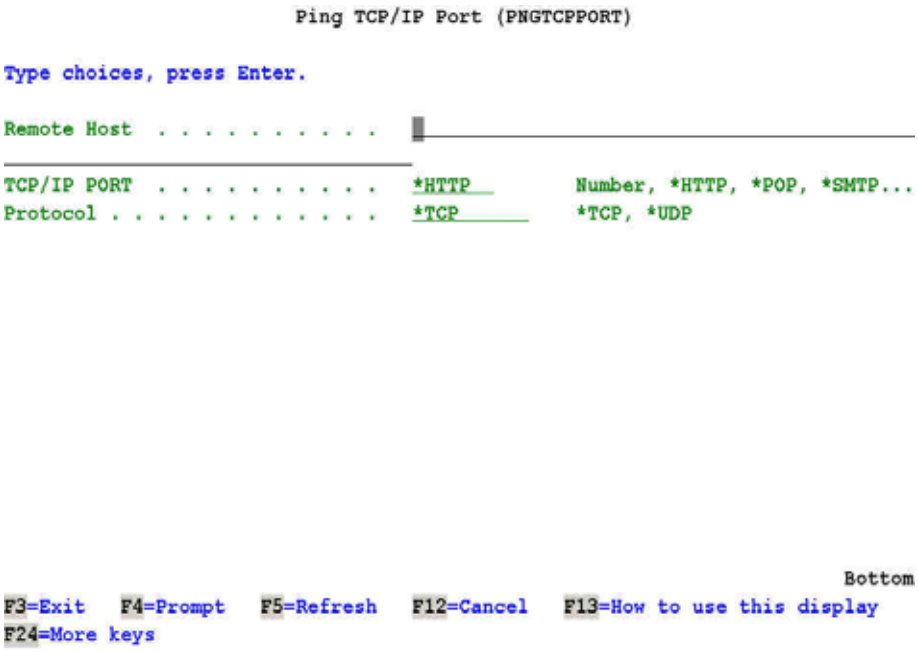
The values allowed are:

***YES** Existing document is overwritten

***NO** Existing document is not overwritten

13.2.11 Command PNGTCPPORT

Use the command PNGTCPPORT to test UDP connections.



0269 – The PING command

Remote host
Specify here the host name (from the host table CFGTCP, option 10), or the TCP/IP address of the host.

TCP/IP port
Choose here the custom or default port for the PING.

The values allowed are:

Number Any port number between 1 and 9999

***HTTP** The HTTP port will be used

***POP** The POP port will be used

***SMTP** The SMTP port will be used

***FTP** The FTP port will be used

***TFTP** The TFTP port will be used

***TELNET** The TELNET port will be used

***LPD** The LPD port will be used

Protocol
Select the protocol to be used.

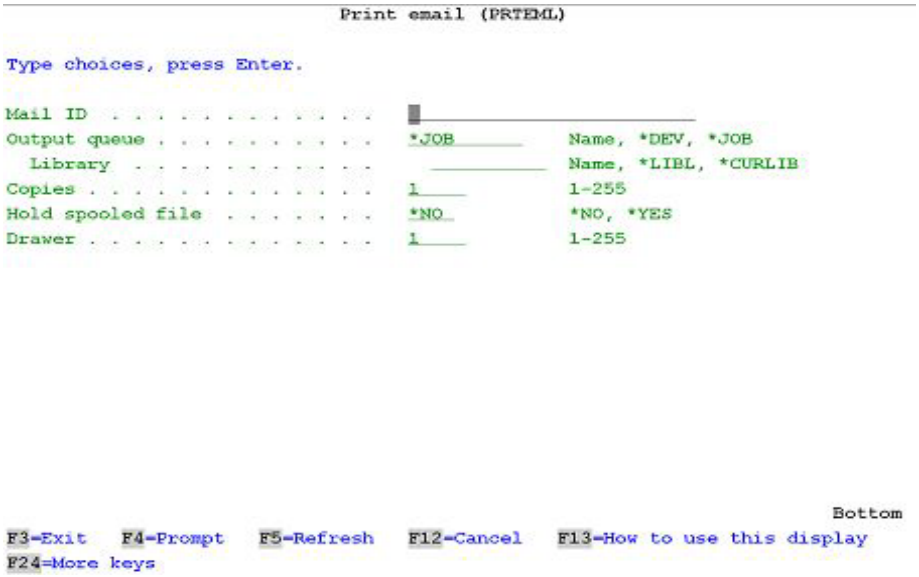
The values allowed are:

***TCP** Ping using the TCP protocol

***UDP** Ping using the UDP protocol

13.2.12 Command PRTEML

Using the command PRTEML, you can print emails with a known mail ID.



0277 – The command PRTEML

Mail ID

Enter the 20-character mail ID that identifies every email uniquely. You get the 20-character mail ID automatically from the Incoming Mail Assistant using the function ***EXITPGM** among others.

Output queue/Library

Specify an output queue for the spoolfile.

The values allowed are:

Name The name of an output queue to which the spoolfile is printed.

***JOB** The output queue from the job description is used.

***DEV** The output queue from the device description for the screen session is used.

Copies

Specify the number of copies to be printed.

Hold spoolfile

When spoolfiles are copied to an output queue, you can hold them with this parameter for later printing.

The values allowed are:

Y = Yes, the spoolfile is put into the output queue with the status HLD after being processed.

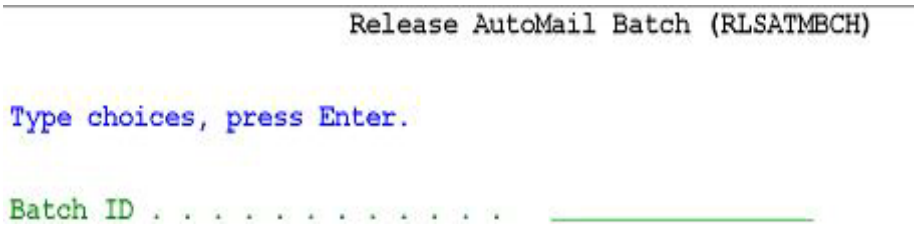
N = No, the spoolfile is not held after being processed.

Tray

Specify from which paper tray the printer should take the paper for the printout.

13.2.13 Command RLSATMBCH

You can use RLSATMBCH (Release AutoMail Batch) to release complete AutoMail batches that were created in the "Hold" mode with a single command.



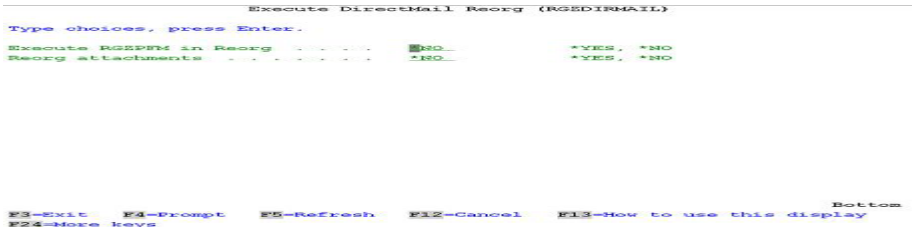
0278 – The command RLSATMBCH

Batch ID

The unique batch ID must be specified as a parameter. This ID can be determined using option **5** in the mailbox.

13.2.14 Command RGZDIRMAIL

Using the command RGZDIRMAIL, you can reorganise DirectMail at any time and also optionally reorganise physical files.



0279 - Reorg DirectMail

Execute RGZPFM in Reorg

Specifies whether files are also physically reorganised (deleted records removed) during a logical reorganisation of DirectMail.

The values allowed are:

***YES** The files are reorganised

***NO** The files are not reorganised

Reorganise attachments

Specifies whether attachments are also physically reorganised (deleted records removed) during a logical reorganisation of DirectMail.

The values allowed are:

***YES** The attachments are reorganised

***NO** The attachments are not reorganised

Remove emails during reorg (RGZRMV)

Specifies whether mails are physically deleted after the defined number of days, or moved to the "Deleted" folder.

.

The values allowed are:

***YES** Mail is deleted after the defined number of days (default).

***NO** Mail is moved to the "Deleted" folder after the defined number of days.

Mail in the "Deleted" folder is deleted after it expires. The expiry period is calculated as if the mail had been manually deleted.

13.2.15 Command RSTOBJIFS

Using the command RSTOBJIFS, you can restore objects saved in the Integrated File System (IFS) with the command SAVOBJIFS. During backup, iSeries data is saved in a savefile and copied to the IFS.

0280 – Restore objects from IFS

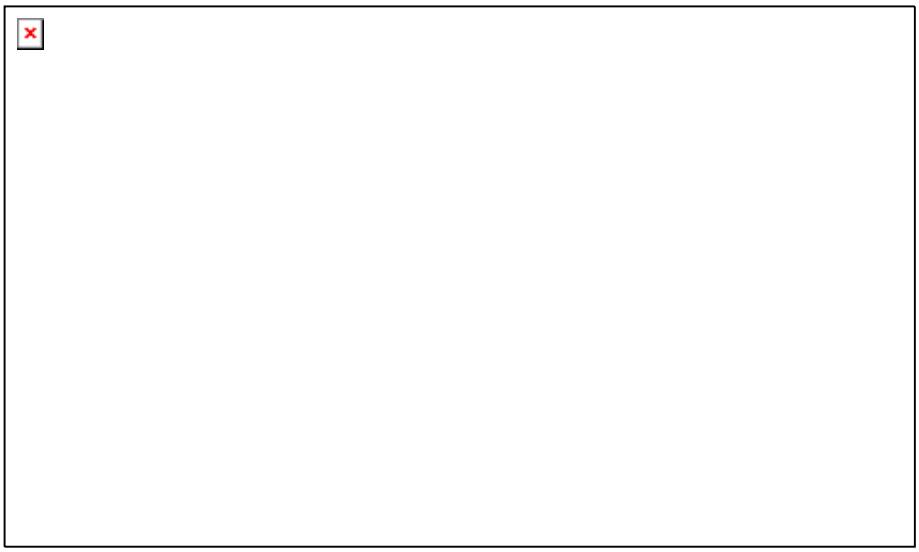
IFS object

Specify the directory and object name under which the objects in the IFS are saved. The object name must be a savefile.

```
                              Restore Object (RSTOBJ)

Type choices, press Enter.

Objects  . . . . . .  . . . .  qolpsrc___    Name, generic*, *ALL
           + for more values   _____
Saved library  . . . . . . . .  engel_____    Name
Device . . . . . . . . . . . .  *savf_____    Name, *SAVF, *MEDDFN
           + for more values   _____
Object types . . . . . . . . .  *ALL___      *ALL, *ALRTBL, *BNDDIR...
           + for more values   _____

                                                                      Bottom
F3=Exit   F4=Prompt   F5=Refresh   F10=Additional parameters   F12=Cancel
F13=How to use this display        F24=More keys
```

0281 – Display saved objects

In this step, the content of the savefile is displayed prior to the actual restore. Saved members can be displayed with option **5**.

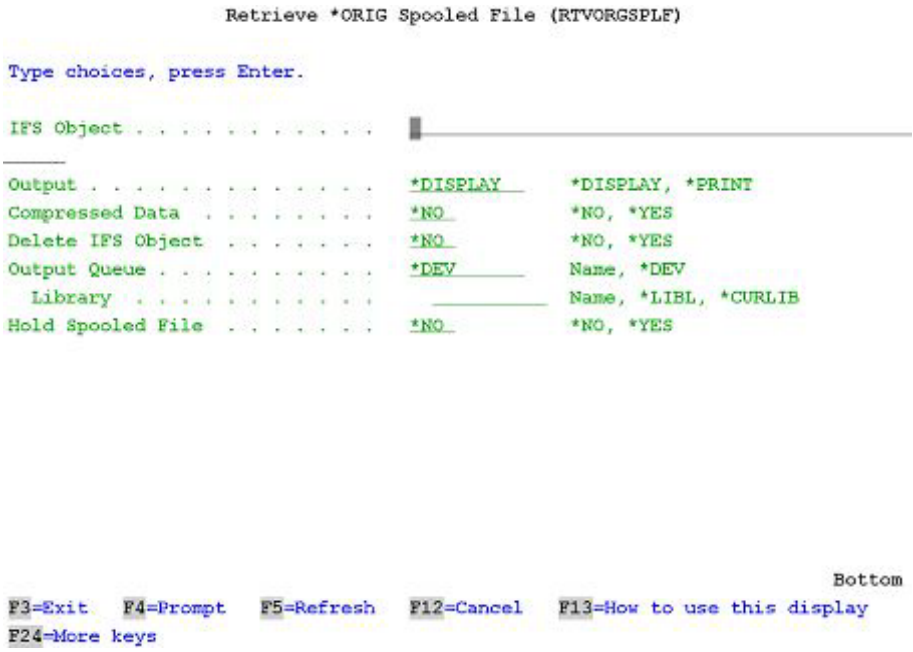


0282 – Restore objects

Use the parameters for the OS/400 command RSTOBJ to restore the displayed objects to a library of your choice.

13.2.16 Command RTVORGSPLF

Use this command to retrieve the original spoolfile out of the IFS object.



0283 – Retrieve spoolfile

IFS object
The qualified name of the IFS object.

Output
Allows you to either display the IFS file or send it to a print outqueue.

Compressed data
If the file has been packed, you can unpack it with *YES.

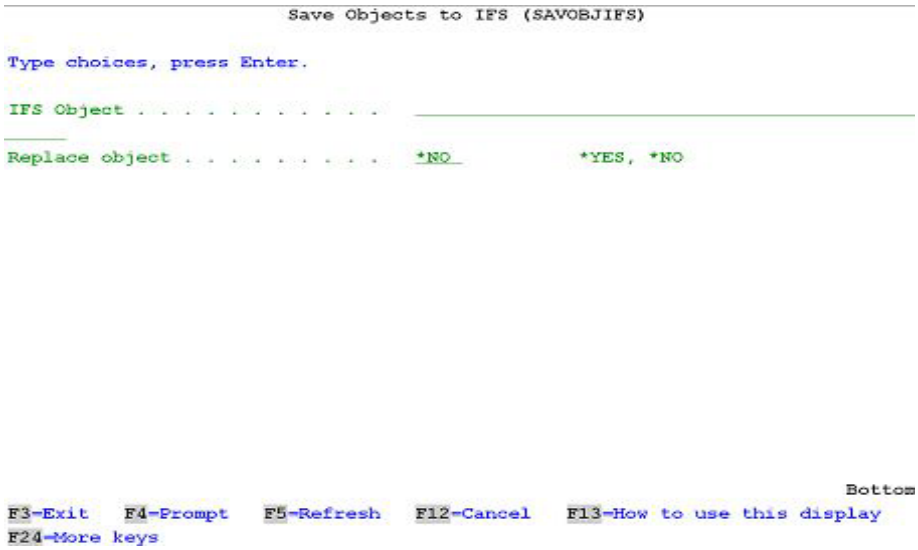
Delete IFS object
Allows you to delete the IFS object after executing the command.

Output queue
Specify the name of the output queue to which you want to send the spoolfile.

Hold spoolfile
Specifies whether the spoolfile is printed immediately or set to *HLD.

13.2.17 Command SAVOBJIFS

Use this command to save iSeries objects to the Integrated File System on the iSeries. Objects are saved to a savefile and stored in the IFS.



0284 - Save objects to IFS

IFS object

Specify the directory and object name under which the objects in the IFS are saved. The object name must be a savefile.

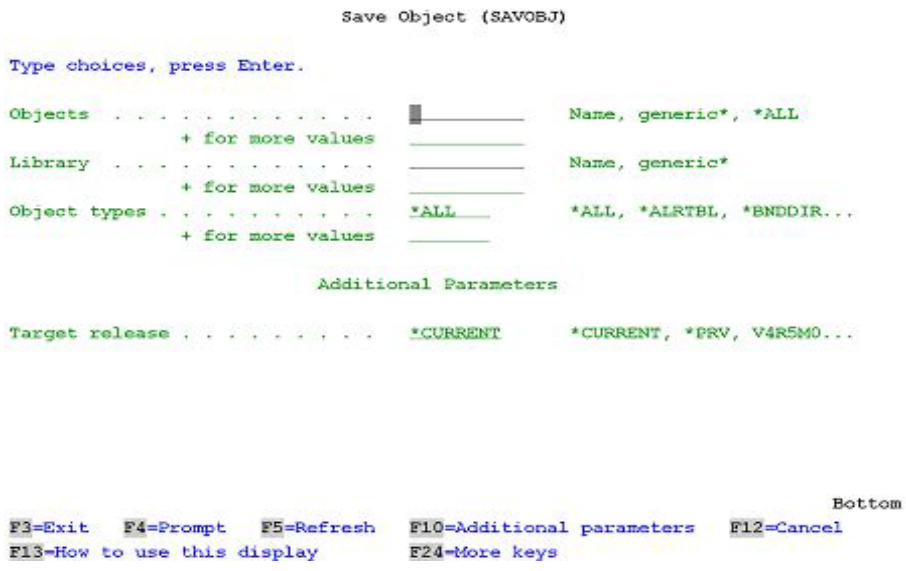
Replace object

Specify whether any existing document in the IFS is overwritten

The values allowed are:

***YES** Existing document is overwritten

***NO** Existing document is not overwritten

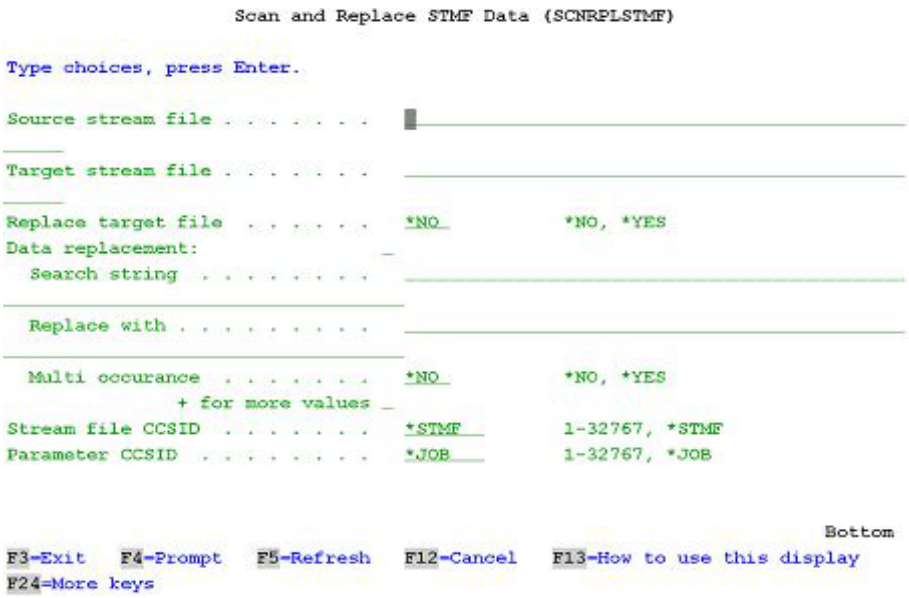


0285 – Replace object

Use the parameters for the OS/400 command SAVOBJ to save the objects to savefile in the library of your choice, which is then stored in the IFS.

13.2.18 Command SCNRPLSTMF

You can search and replace values in an IFS file with the command SCNRPLSTMF. For example, this is useful if you want to replace dummy fields with real values in HTML documents.



0286 – Scan and replace

Source stream file
Type the name of the IFS file you want to search.

Target stream file
Type the name of the target IFS file to hold the replacement values.

Replace target file
You can replace the target file if it already exists.

Search and replace
Search one or multiple strings and replace them.

Search string
Type a search string.

Replace with
Specify the string to replace the search string.

Multi occurrence
To repeat the search until the end of the file is reached, specify *YES.

Stream file CCISD
Type in the CCSID of the target file. *STMF specifies the same CCSID as the source file.

Parameter CCSID
Allows you to specify a CCSID other than the job ID.

13.2.19 Command CHGDMLLNG

Use the command CHGDMLLNG to change the iSeries language settings.

0305 – Change language

New DirectMail language
Select one of the following languages:

- DES German (Switzerland)
- DEU German
- ENG English
- FRA French
- ITA Italian

13.2.20 Command SNDOBJFTP

Use the command SNDOBJFTP to transfer files to remote systems using FTP.

```
                    Send Object using FTP (SNDOBJFTP)

Type choices, press Enter.

IFS Object . . . . . .   '/toolmaker/test.txt'
Remote system . . . . . .   S20TCP
Remote user . . . . . .   CMA
Remote password . . . . . .   ******
Remote path . . . . . .   '/toolmaker/'
Binary mode . . . . . .   *YES          *YES, *NO
Delete IFS Object . . . . . .   *NO           *YES, *NO
                                                                  Bottom
F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display
F24=More keys
```

0306 – Send object using FTP

IFS object
Type the name of the IFS object you want to send.

Remote system
Enter the name of the remote system to which you want to send the object.

Remote user
Specify the name of the remote user.

Remote password

Enter the remote user's password.

Remote path
Specify the remote path to which you want to send the object.

Binary mode
Specify whether the object is sent in binary mode.

The values allowed are:

***YES** The object is sent in binary mode (default)

***NO** The object is not sent in binary mode

Delete IFS object
Specify whether the file should be deleted after being sent.

The values allowed are:

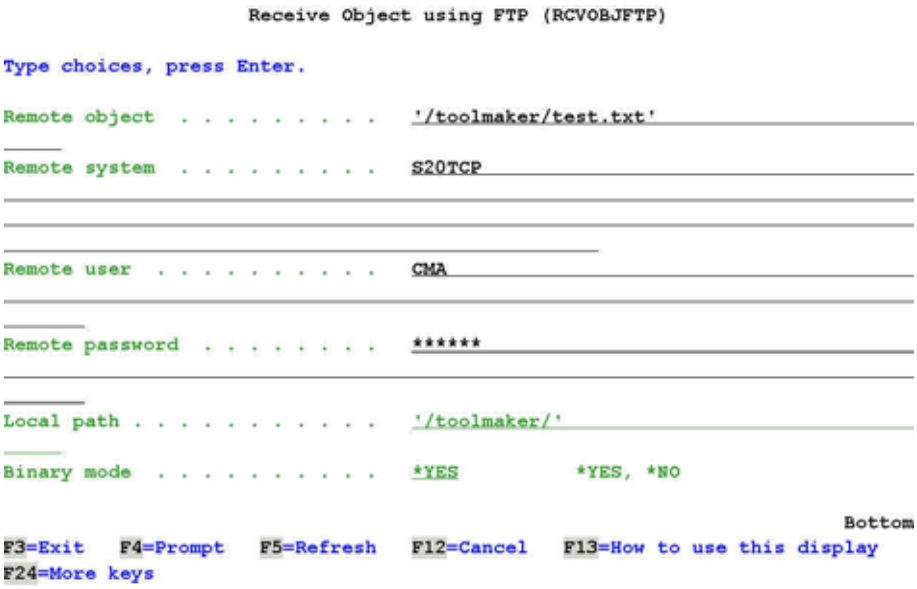
***YES** The IFS object is deleted after it is sent

***NO** The IFS object is not deleted after it is sent (default)

You must have a DM400API license to use the command SNDOBJFTP.

13.2.21 Command RCVOBJFTP

Use the command RCVOBJFTP to receive files from remote systems using FTP.



0307 – Receive object using FTP

Remote object (RMTOBJ)
Type the name of the remote object you want to receive.

Remote system (RMTSYS)

Enter the name of the remote system from which you want to receive the object.

Remote user (RMTUSR)
Specify the name of the remote user.

Remote password (RMTPWD)
Enter the remote user's password.

Local path (LCLPTH)
Specify the local path you want to use to store the object.

Binary mode (BINARY)
Specify whether the object is received in binary mode.

The values allowed are:

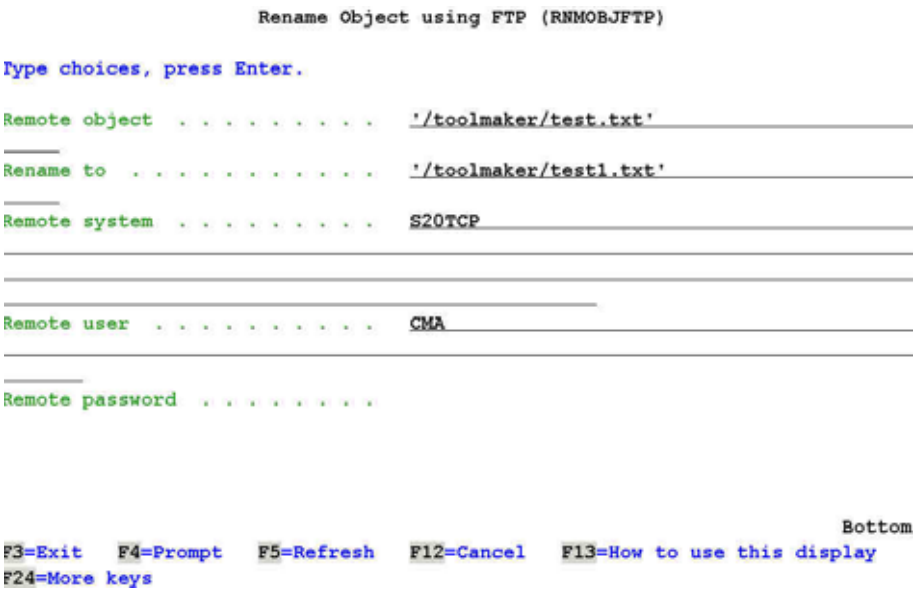
***YES** The object is received in binary mode (default)

***NO** The object is not received in binary mode

You must have a DM400API license to use the command RCVOBJFTP.

13.2.22 Command RNMOBJFTP

Use the command RNMOBJFTP to rename files using FTP.



0308 – Rename object using FTP

Remote object
Type the name of the remote object you want to rename.

Rename to
Type the name of the remote object you want to rename.

Remote system

Enter the name of the remote system on which you want to rename the object.

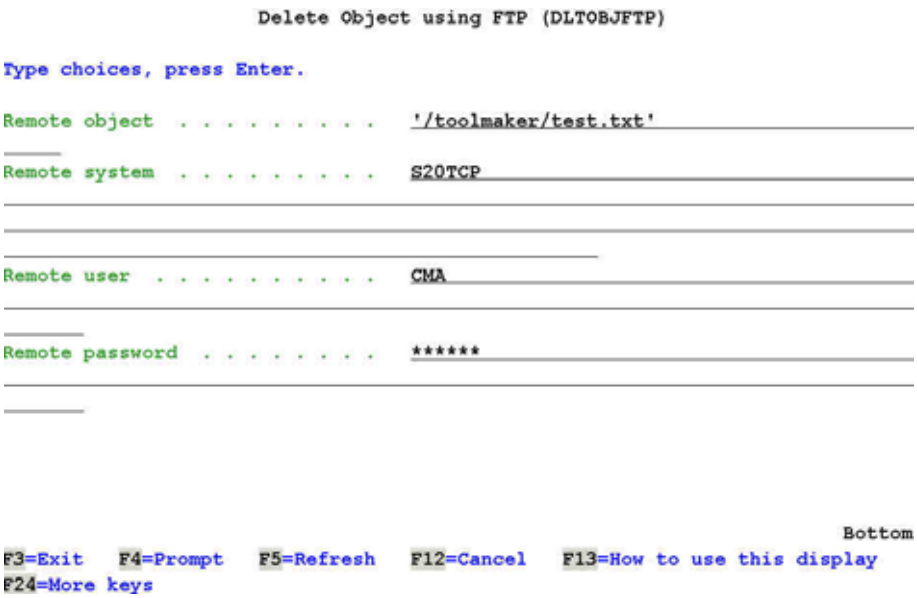
Remote user
Specify the name of the remote user.

Remote password
Enter the remote user's password.

You must have a DM400API license to use the command RNMOBJFTP.

13.2.23 Command DLTOBJFTP

Use the command DLTOBJFTP to delete files using FTP.



0309 – Delete object using FTP

Remote object
Type the name of the remote object you want to delete.

Remote system
Enter the name of the remote system on which you want to delete the object.

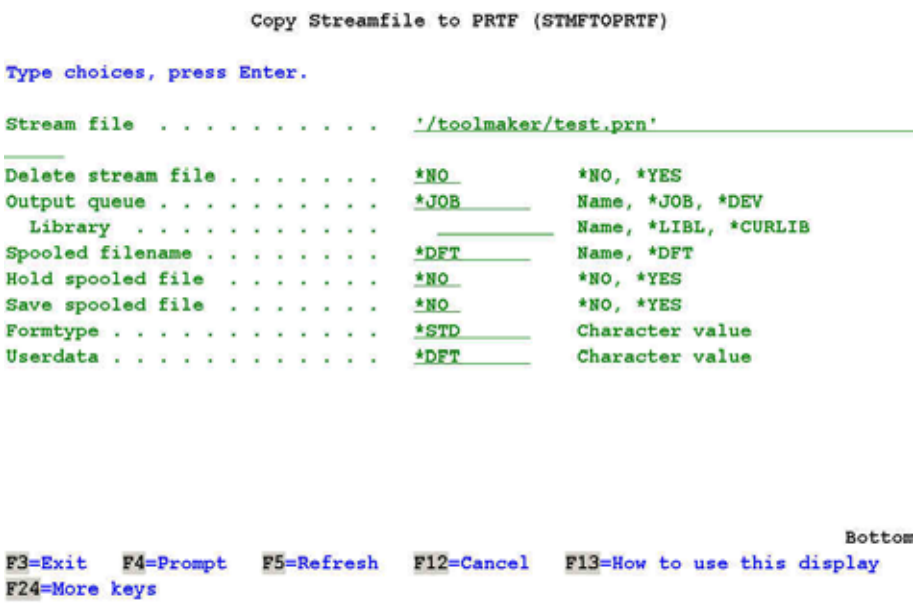
Remote user
Enter a valid user on the remote system.

Remote password
The user's password on the remote system.

You must have a DM400API license to use the command DLTOBJFTP.

13.2.24 Command STMFTOPRTF

Use the command STMFTOPRTF to copy an IFS data stream file to a USERASCII printfile. A number of output parameters are required.



0310 – Copy data stream file to PRTF

Stream file (OBJ)
Specify the name of the stream file.

Delete stream file (DELETE)
Specify whether the IFS stream file should be deleted after being copied.

The values allowed are:

***YES** The stream file is deleted after the copy

***NO** The stream file is not deleted after the copy (default)

Output queue (OUTQ)
Specify the name of the stream file.

The values allowed are:

Name The name of the output queue

***JOB** The job name (default)

***DEV** The output device name

Library
The name of the library containing the output queue.

The values allowed are:

Name The library name

***LIBL** The library list is used

***CURLIB** The current library list

Spool file name (SPLFNAME)
You can use the original spoolfile name or specify a new one.

The values allowed are:

Name A new spoolfile name

***DFT** Use the original name (default)

Hold spoolfile (HOLD)
When spoolfiles are copied to an output queue, you can hold them after copying to delay further processing.

The values allowed are:

***YES** Hold the spoolfile

***NO** Do not hold the file (default)

Save spoolfile (SAVE)
The spoolfile can be saved after processing.

The values allowed are:

***YES** Save the spoolfile

***NO** Do not save the file (default)

Form type (FORMTYPE)
Enter the form type you want to use.

The values allowed are:

***STD** Use the standard form type.

User data (USRDTA)
Enter the user data you want to use.

The values allowed are:

***DFT** Use the default user data

13.2.25 Command WRKEML

Use the command WRKEML to work with the emails in a mailbox.

```
                    Work with DirectMail Emails (WRKEML)

Type choices, press Enter.

Mailbox  . . . . . .  *CURRENT     Character value, *CURRENT

                                                                      Bottom
F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display
F24=More keys
```

0321 – Work with DirectMail emails

Mailbox(MAILBOX)
Enter the mailbox.

The values allowed are:

String Type the mailbox name

***CURRENT** The current mailbox is selected (default)

13.2.26 Command SETPWR

Use SETPWR to set Lindy Set Power Switch parameters.

```
                        Set Power Switch (SETPWR)

Type choices, press Enter.

Host/IP  . . . . . .  _____________________________________
_____________________________
User . . . . . .  _____________________________________
_____
Password . . . . . .  _____________________________________
_____
Switch . . . . . .  _          1, 2, 3, 4, 5, 6, 7, 8
Set power  . . . . . .  _______    *ON, *OFF, *TOGGLE, *PULSE

                                                                      Bottom
F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display
F24=More keys
```

311 – Set Power Switch

Host/IP

Enter the Host/IP.

User
Enter the user.

Password
Enter the password.

Switch
Enter the switch number.

The values allowed are:

1-8 Select a switch number

Set power

The values allowed are:

***ON** Turn the selected switch on

***OFF** Turn the selected switch off

***TOGGLE** Toggle mode

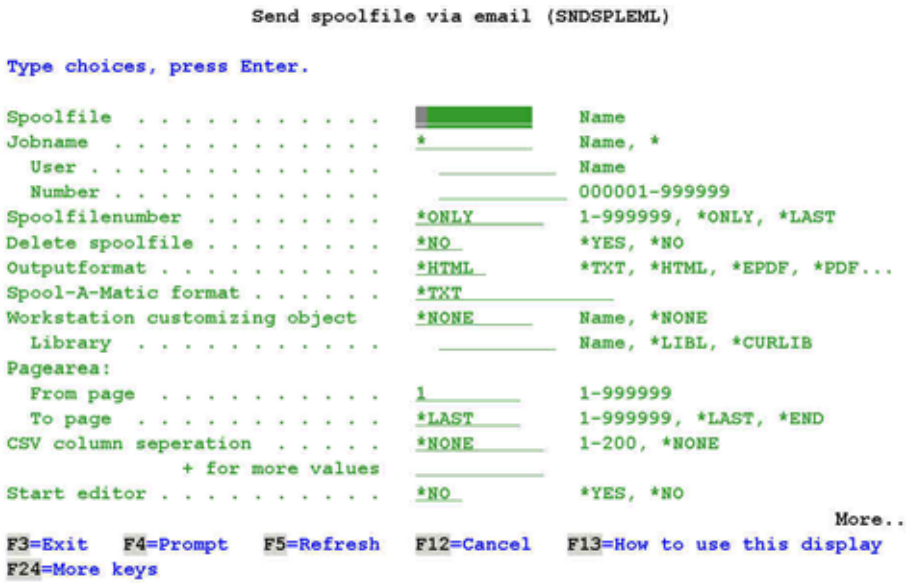
***PULSE** Pulse mode

14.0 Send spoolfile

DirectMail contains the option "Send spool" with which you can easily send spoolfiles from the iSeries to your business partners, outdoor staff, representatives, etc. Without paper, in an attractive format and above all, faster than all our competitors.

14.1 Send spoolfile via email (option 12)

If you know the name of the spoolfile, you can send it with the iSeries command **SNDSPLEML**.



0287 - Send spoolfile via email, screen 1

Spool file (FILE)
The name of the spoolfile to be attached.

Jobname, User, Number
The job information for the spoolfile (can be displayed with the iSeries command WRKSPLF).

Spool file number (SPLNBR)
The spool sequence number for the job.

Delete spoolfile (DLTSPLF)
Specify whether the spoolfile should be deleted after being sent.

The values allowed are:

***YES** The spoolfile is deleted after being attached to the email

***NO** The spoolfile is not deleted

Output format (FORMAT)
Specify into which format the spoolfile is to be converted.

The values allowed are:

***HTML** The spoolfile is converted into an HTML document

***TXT** Converted to ASCII text

***PDF** Converted to Acrobat Reader format

***EPDF** Adobe's PDF file format, but in the Enhanced Version of DirectView PDF. This format supports elements such as form overlays, allowing you to use background JPG or TIF files with the spool to create complete printed forms.

***ORIG** Sent in the original iSeries format

***RAW** Copies the pure data stream to a PC file (used for PCL and AFP).

***GUMBO** Sets SPLAMATIC as the default file format for converted spoolfiles.

***TIFF** The spoolfile is converted to a TIFF graphic and attached.

***CSV** Sets semicolon delimited text as the default file format.

***PCL** PCL is used for page descriptions.

***HPT** The spoolfile is converted into an HPT document

Spool-A-Matic format (GUMBOFMT)

Specify the format for SPLAMATIC. You can display the formats available with F4.

Workstation customising object (WSCST)

With conversion using host-print-transform, you can insert a workstation customising object which will be used when converting the printer data stream.

Library

Enter the name of the library in which the workstation customising object is saved.

Page range from-to (PAGERANGE)

Allows you to select a page range for the spoolfile to be attached.

The values allowed are:

Page number

***LAST** Attach up to the last page number

***END** Attach up to the last page number

CSV column separation (CSVTAB)

Controls column separation.

The values allowed are:

1-200 Number of columns

***NONE** No column separation

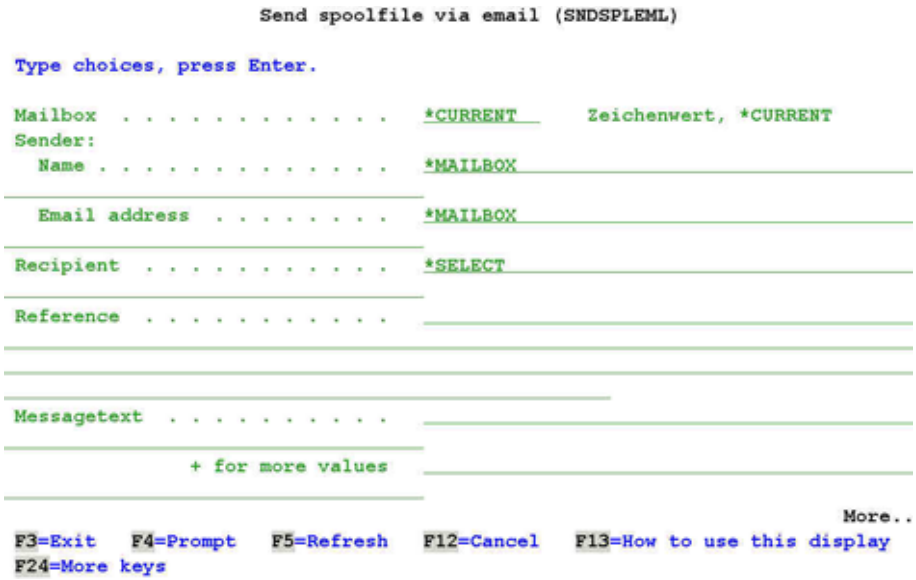
Start editor (EDIT)

Specifies whether the editor is started to add subject, text and other information to the email.

The values allowed are:

***YES** The editor is started

***NO** The editor is not started



0288 - Send spoolfile via email, screen 2

Mailbox(MAILBOX)

The name of the mailbox used to send the spoolfile. ***CURRENT** Specifies the current user's mailbox.

Sender name (SENDER)

Enter the name of the sender, or the special value *MAILBOX to use the user data from the mailbox.

Sender email address

Enter the sender's email address, or the special value *MAILBOX to use the user data from the mailbox.

Recipient (RCVR)

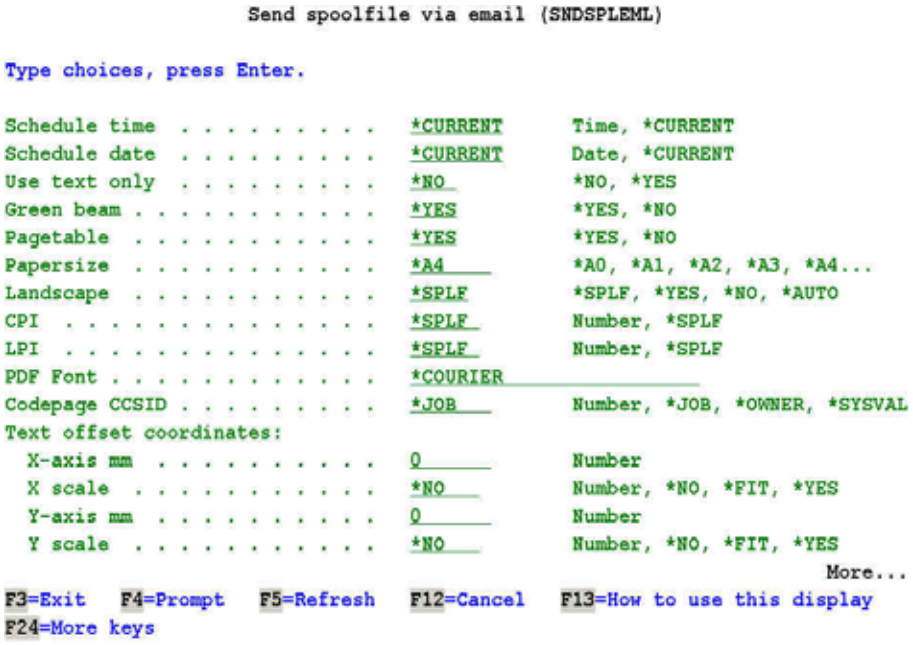
Enter the recipient's email address. The address book can be displayed with ***SELECT** so that you can select an address.

Subject (SUBJECT)

The email's subject.

Message text (TEXT)

Here you can enter a message text for the email.



0289 - Send spoolfile via email, screen 3

Schedule time (SCDTIME)
Schedule date (SCDDATE)

If you want to send the e-mail on a specific date/time, please enter this here. Otherwise the email will be sent as soon as possible

Use text only (TEXTONLY)

If this parameter is set to "*YES", only the text will be used from the spooled file, no graphics or other elements.

Green bars (GREENBAR) – with HTML format

Specify whether the lines in the HTML format should be separated by white/green bars (giving the effect of a print on paper stock).

Page table (PAGETABLE)

With documents containing multiple pages, a page table is inserted in the HTML format at the beginning of the document, ensuring better navigation.

Paper size (PAPERSIZE)

Specify the paper size for the PDF file. This setting is only available with *EPDF format.

The values allowed are:

A0 to A6 DIN (German industry norm) formats

B5 DIN (German industry norm) format

LEDGER, LEGAL, LETTER, P11*17 Other formats

Landscape (ROTATION)

Specify whether the form should be rotated to landscape format. This setting is only available with *EPDF format.

The values allowed are:

***SPLF** The value for the spoolfile page rotation is used

***YES** The form is in landscape format

***NO** The form is not in landscape format

***AUTO** The form is automatically rotated so that the margins are not crossed.

CPI (CPI)
Here you can set individual text widths in CPI (characters per inch) differing from the spoolfile.

The values allowed are:

Number A valid CPI setting (e.g. 5,8,10,12,15,16,7...)

0 The spoolfile CPI value is used

LPI (LPI)
Here you can set individual text heights in LPI (lines per inch) differing from the spoolfile.

The values allowed are:

Number A valid LPI setting (e.g. 5,8,10,12,15,16,7...)

0 The spoolfile LPI value is used

PDF font (FONT)
When using Unicode conversion, specify the PDF font for character conversion.

Codepage CCISD (CCSID)
When using Unicode conversion, specify the CCSID to ensure that characters are properly displayed in PDF format.

Text offset co-ordinates (PDFAREA)
X axis mm
Allows you to move the original spool text right (values in mm). Negative values shift the text left.

X scale
Type in the scaling factor for the original spool text.

The values allowed are:

Number – A percentage of the original size (for example 90 = 90%, 120 = 120%)

***NO** – Do not scale

***YES/*FIT** – Scale to page-size – keeps the spool text within the page margins.

Y axis mm
Allows you to move the original spool text down (values in mm). Negative values shift the text up.

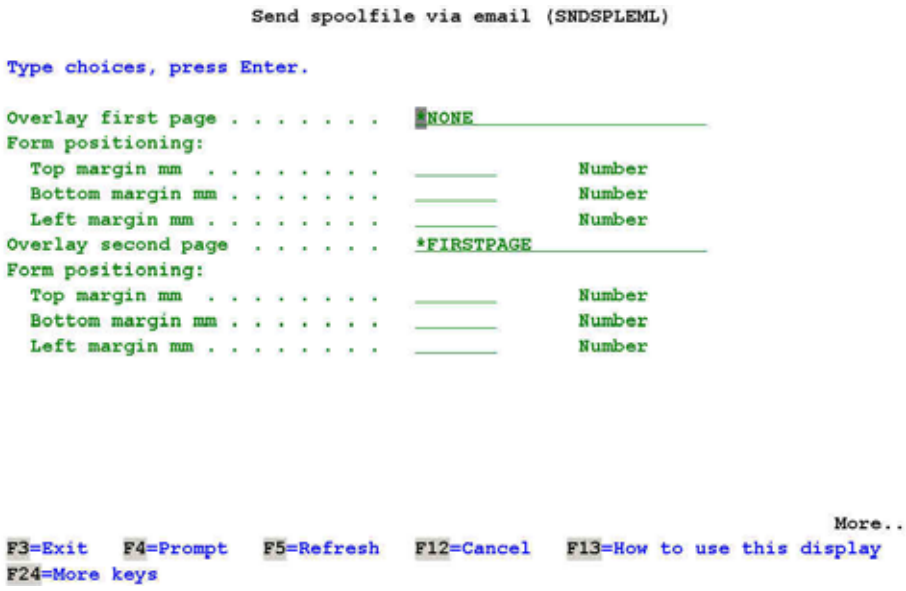
Y scale
Type in the scaling factor for the original spool text.

The values allowed are:

Number – A percentage of the original size (for example 90 = 90%, 120 = 120%)

***NO** – Do not scale

***YES/*FIT** – Scale to page-size – keeps the spool text within the page margins.



0290 - Send spoolfile via email, screen 4

Overlay first page (OVERLAY)
Enter the name of a form to be added to the PDF file. The file must be in the FORMS directory of DirectMail400. This setting is only allowed when using *EPDF format.

Form positioning (MARGINS)
Enter the margins so that the graphic can be aligned as required.

Overlay second page (OVERLAY2)
Specify the form for continuation pages.

The values allowed are:

***FIRSTPAGE**	Continuation pages same as first page
***NONE**	No form

Form positioning (MARGINS2)
Enter the margins so that the graphic on continuation pages can be aligned as required.

```
                    Send spoolfile via email (SNDSPLEML)

Type choices, press Enter.

PDF security settings:
  Master password . . . . . *NONE
  User password . . . . . *NONE
  Encryption key length . . . . 40           40, 128
  Allow print . . . . . *YES          *NO, *YES
  Allow modify . . . . . *YES         *NO, *YES
  Allow copy . . . . . *YES           *NO, *YES
  Allow annotations . . . . . *YES    *NO, *YES
  Allow forms . . . . . *YES          *NO, *YES
  Allow accessible . . . . . *YES     *NO, *YES
  Allow assemble . . . . . *YES       *NO, *YES
  Allow hiresprint . . . . . *YES     *NO, *YES
CCSID of parameter . . . . . *CURRENT      Zahl, *CURRENT
Alias filename . . . . . *ORIG


                                                                  Bottom
F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display
F24=More keys
```

0291 - Send spoolfile via email, screen 5

PDF security settings (PDFSEC)

Specify the settings for PDF files sent encrypted. The parameters are described below in the section on the command CRTSECPDF.

Parameter CCSID (PARAMCCSID)

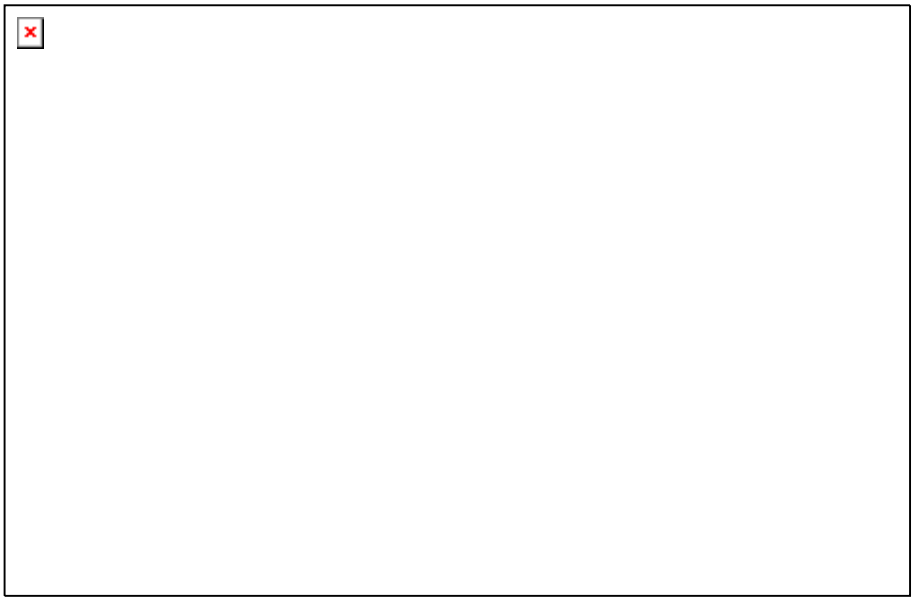
Specify the settings for PDF files sent encrypted. This value determines the CCSID for the parameters passed to the command.

The values allowed are:

Number CCSID table

***CURRENT** CCSID for the current job (default)

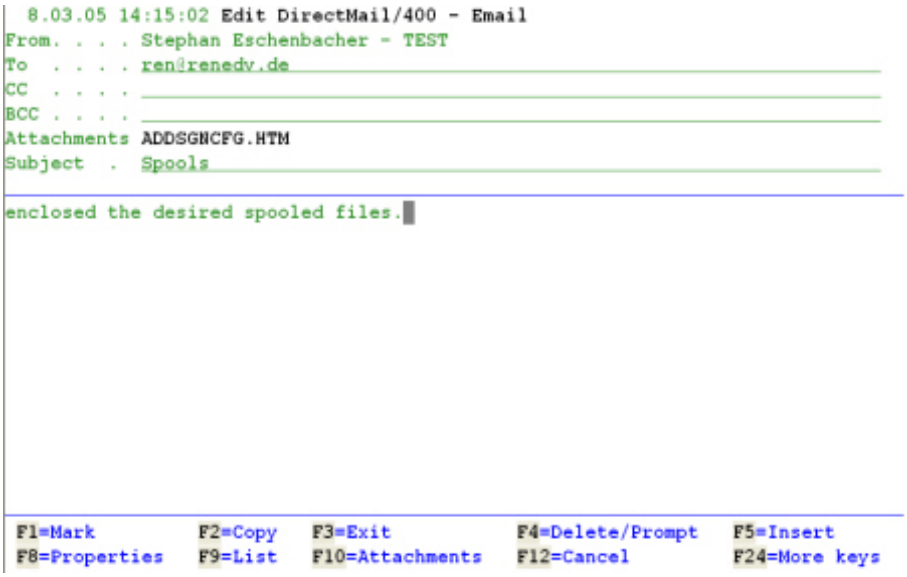
The parameters for email addresses, names, subject and text are automatically translated to the CCSID for the server job.



0322 - Send spoolfile via email, screen 6

Alias filename (ALIAS)
Allows you to specify an alias filename.

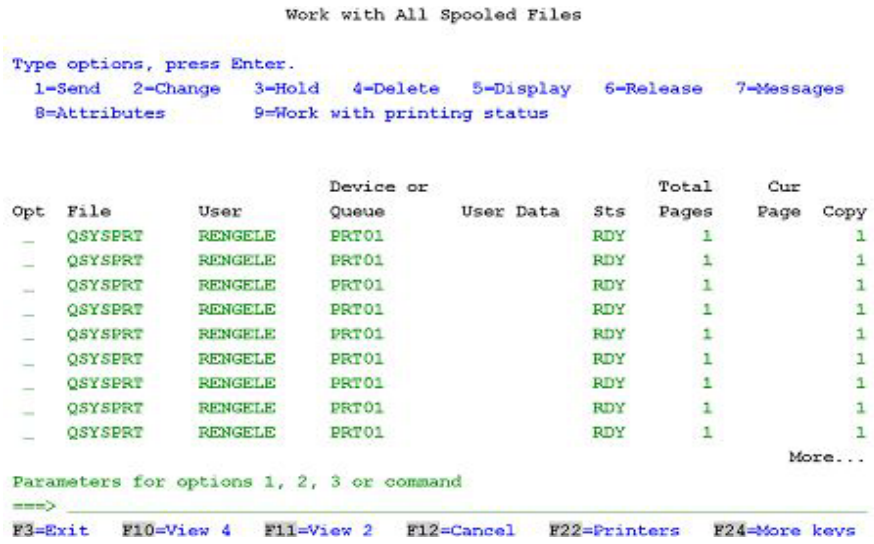
If you have set the "Start editor" to *YES, the editor is now started.



0292 – The Editor display

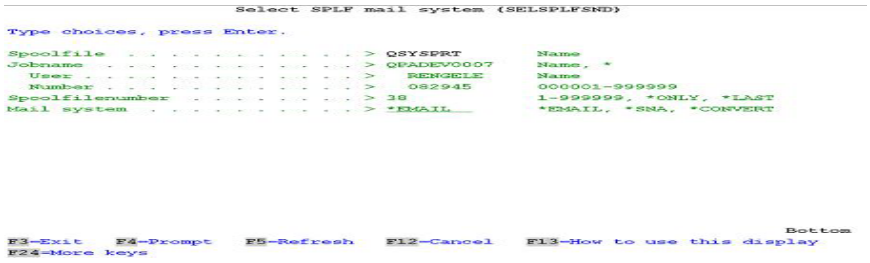
14.2 Send spool with WRKSPLF (option 13)

You can also send spoolfiles using the iSeries command **WRKSPLF** "Work with spoolfiles".



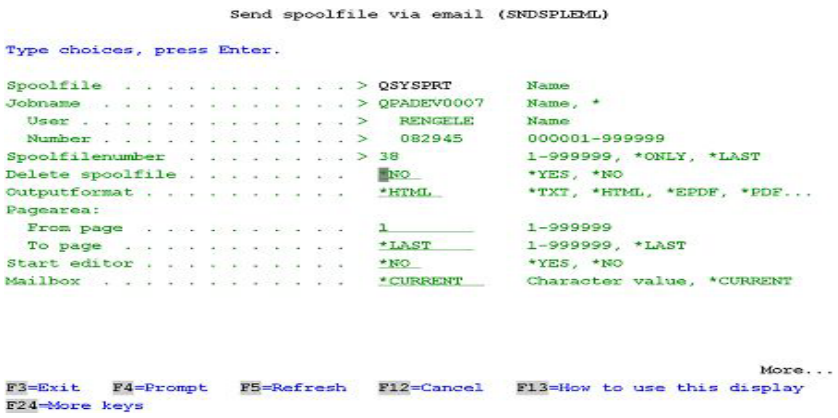
0293 – The WRKSPLF display

Select the spoolfile to be sent with option **1**.



0294 - Select mail system

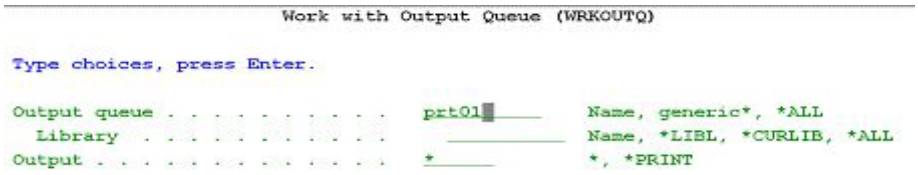
To send using DirectMail, select ***EMAIL** as the mail system. The further parameters correspond to chapter Send **spoolfile via email (menu option 12)**



0295 – Send spoolfile

14.3 Send spool with WRKOUTQ (option 14)

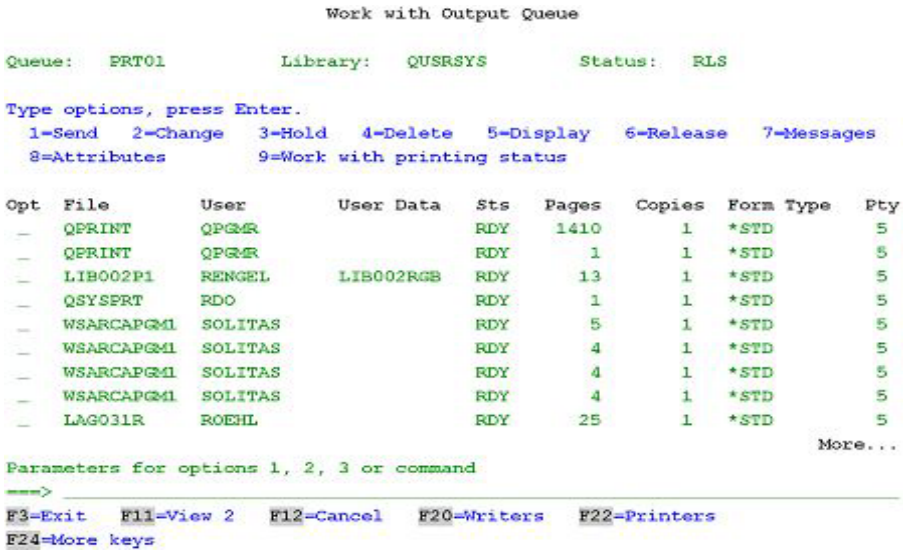
You can also send spoolfiles using the iSeries command **WRKOUTQ** "Work with output queues".



0296 – The WRKOUTQ display

Output queue

Enter the name of the output queue from which you want to send a spoolfile.



0297 – Work with output queue

Select the spoolfile to be sent with option **1**.

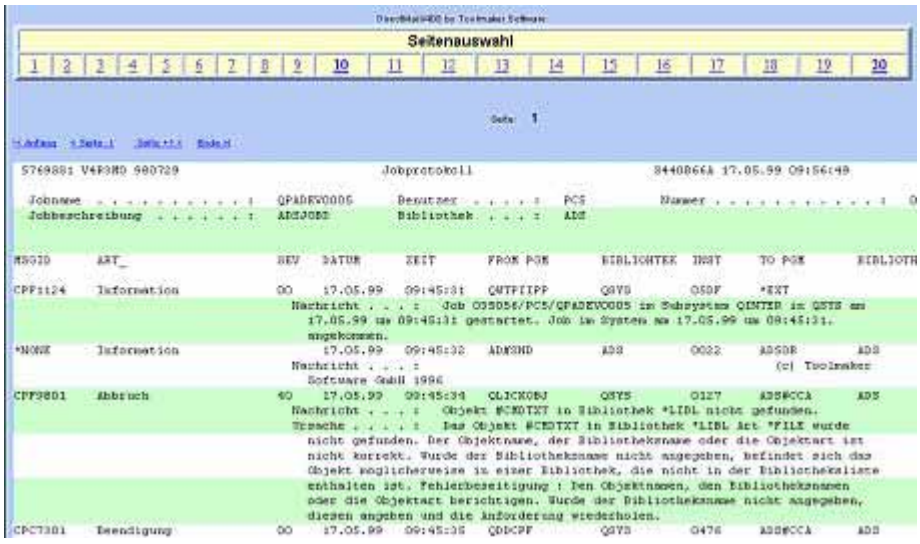
0298 – Select mail system

To send using DirectMail, select ***EMAIL** as the mail system. The further parameters correspond to chapter Send **spoolfile via email (menu option 12)**

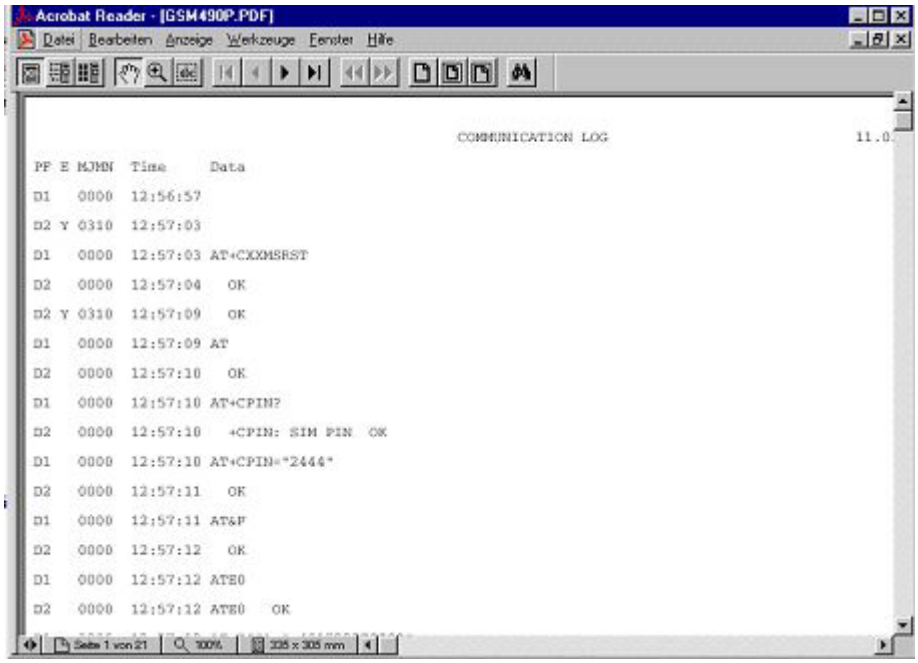
0299 – Send spoolfile

14.4 Spool file sending formats

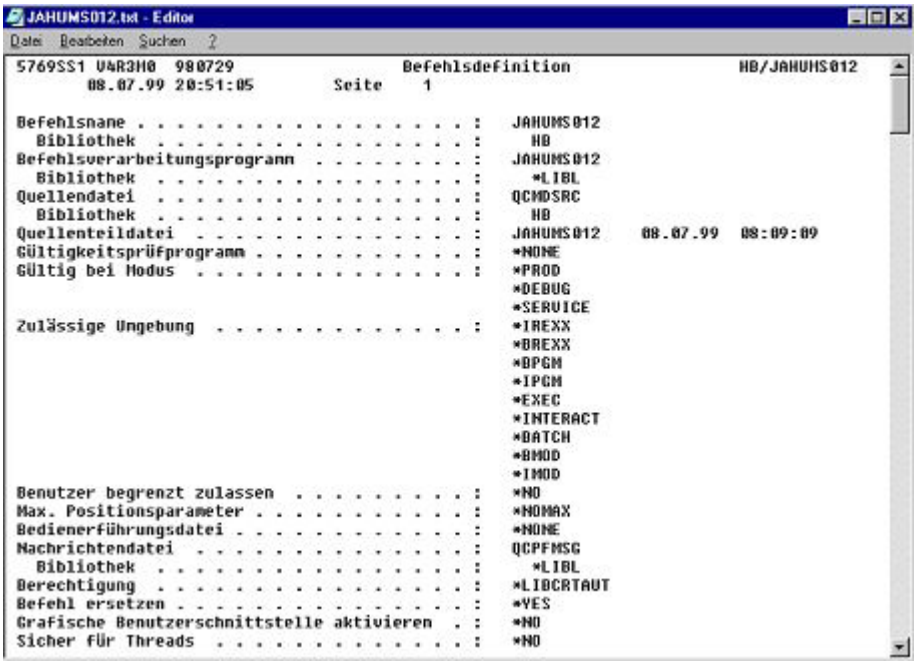
Spool files can be sent in different formats, as previously described. There follows a series of screenshots of the different file formats:



0300 – HTML format



0301 – PDF format



0302 – TXT format

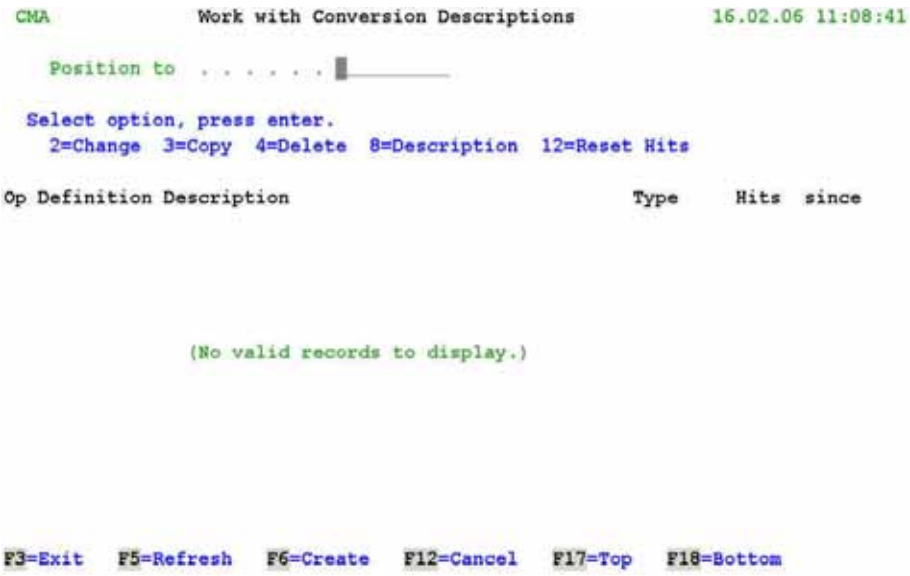
15.0 Conversion descriptions

With conversion descriptions additionally to conversions that run in one process step (e.g. conversion into HTML, TXT or CSV) complex, user defined conversion routines can be configured. With this external spool converters can be integrated and standard conversion can be configured.

Note: Using the parameter FORMAT the conversion description can be specified for all conversion commands and routines.

15.1 Work with conversion descriptions (WRKSPLCNV)

Each description consists of a sequence of CL commands that will be processed during conversion. Into the CL commands variables that will be provided by DirectMail can be inserted.



0368 - Work with conversion descriptions

Options

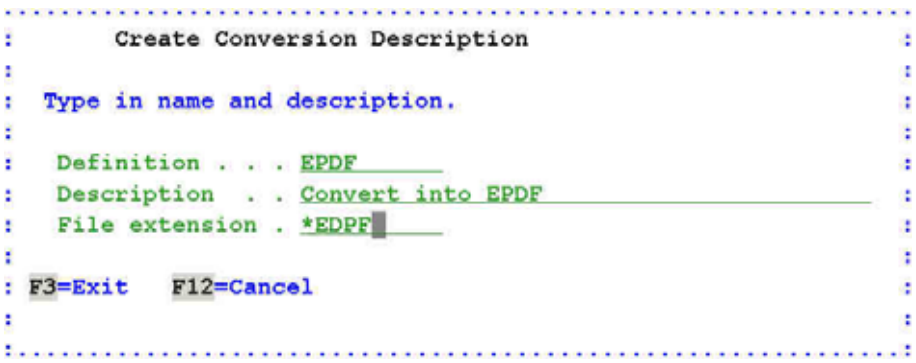
2=Change
Use this option to change an existing conversion description. *3=Copy*

4=Delete
Use this option to delete a conversion description.

8=Description
Use this option to modify the designation of a conversion description.

12=Reset hits
Use this option to reset the counter to zero.

15.1.1 Create a conversion description

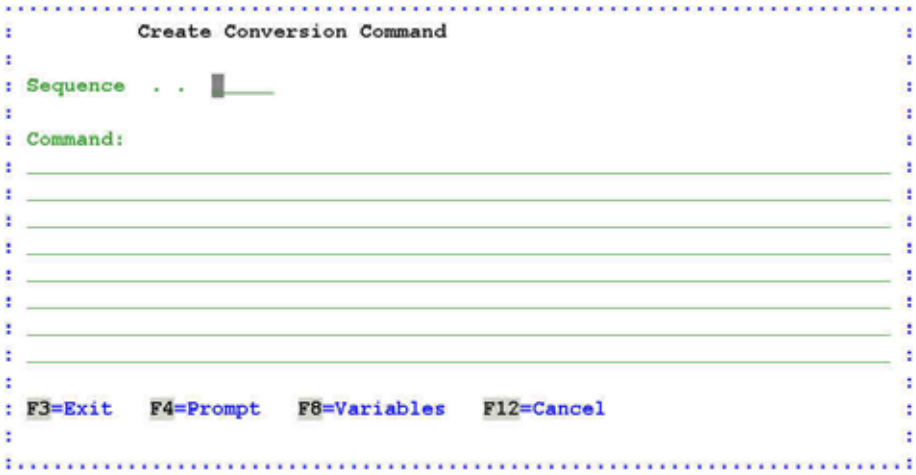


0369 - Work with conversion descriptions

Definition
Name of the conversion description

Description
Explaining designation for the conversion description.

File extension
File extension of the conversion description.

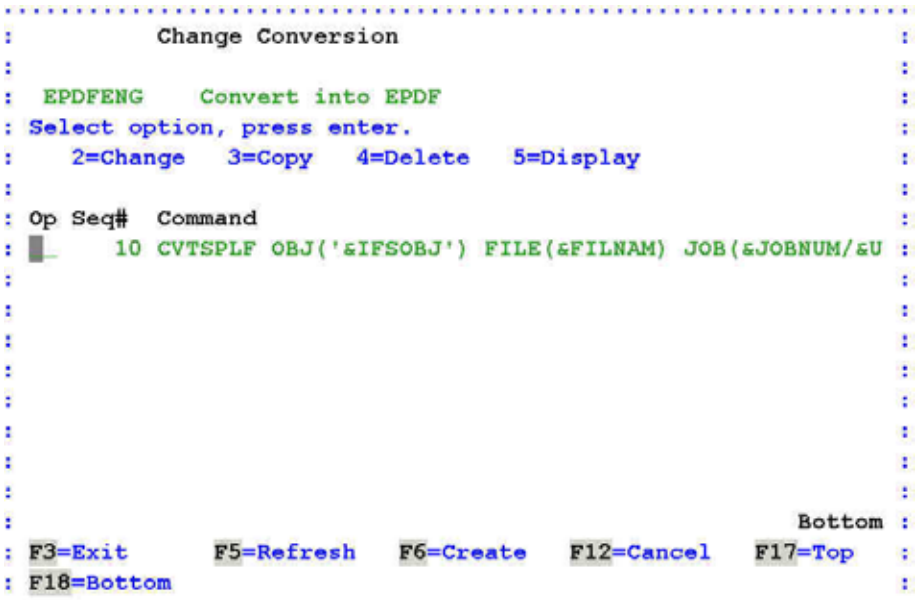


0370 – *Create conversion command*

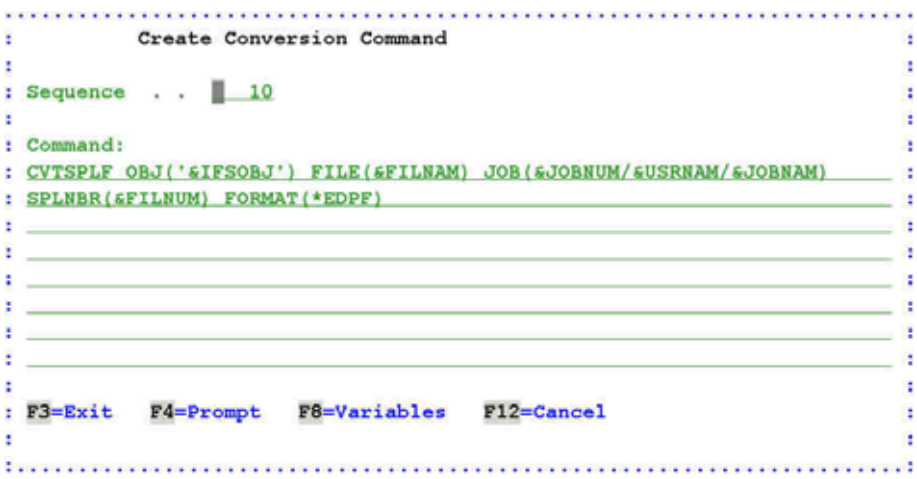
Sequence
Enter a sequence number for the processing sequence of the CL commands.

Command
Enter the CL command including the corresponding parameters.

15.1.2 Change conversion command



0372 – Edit conversions



0371 – Change conversion command

Example: CVTSPLF OBJ('&IFSOBJ') FILE(&FILNAM)
JOB(&JOBNAM/&USRNAM/&JOBNUM)
SPLNBR(&FILNUM) FORMAT(*EPDF)

&IFSOBJ IFS object

&FILNAM Spool file name

&JOBNAM Spool file job name

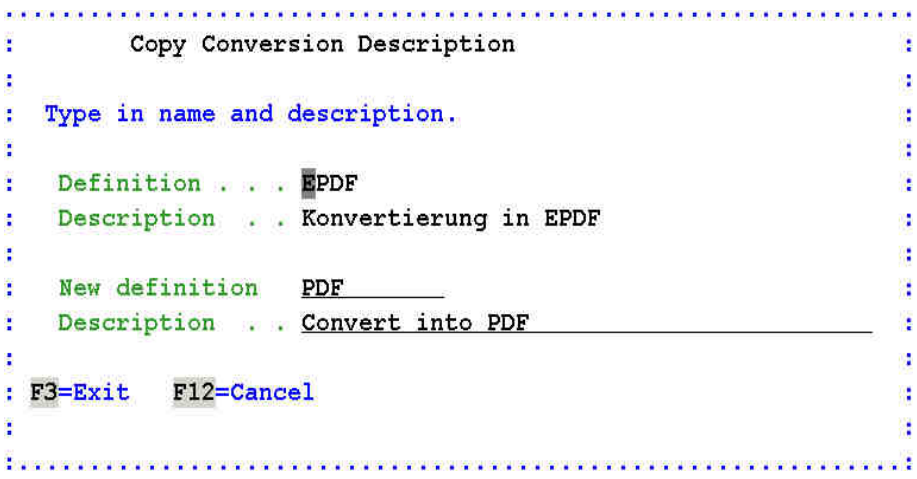
&USRNAM Spool file job user

&JOBNUM Spool file job number

&FILNUM Spool file job number

The above command line would execute a simple conversion to *EPDF.

15.1.3 Copy conversions



0373 – Copy conversion command

New definition
Enter a new definition.

Description
Enter a new description.

15.1.4 Delete conversions

Using this option a conversion can be deleted.

0374 – Delete conversions

16.0 DirectView

DirectView allows you to display spoolfiles on PC workstations in a variety of formats including PDF, HTML, PCL and others, providing the full range of editing functions available for PC documents. Before working with DirectView, you must first configure a number of defaults.

16.1 Work with DirectView users (WRKDVWUSR)

MUse this command to register DirectView users and set user defaults. You can define both users and user groups.

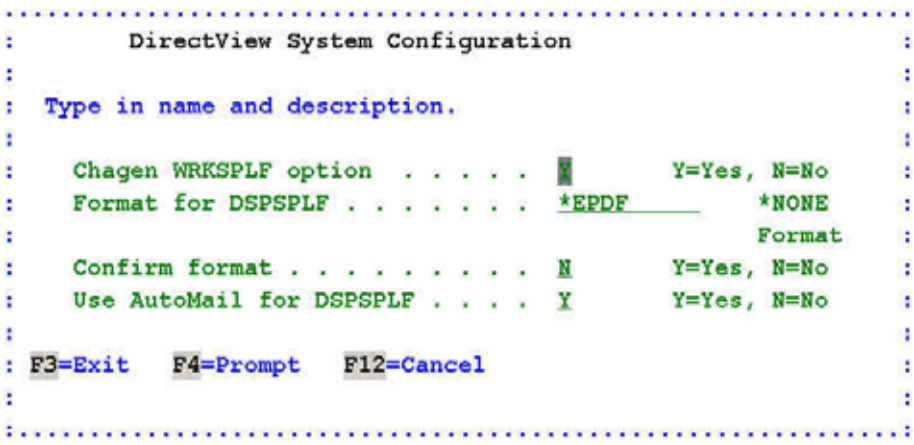
0348 – Work with DirectView users

In this screen, you can add new users with **function key 6**, change user settings with **option 2**, copy existing definitions to another user or group with **option 3**, or delete users with **option 4**.

16.1.1 DirectView system configuration

The System Configuration screen allows you to define the global values applied when users display spoolfiles. DirectView settings can be either 'progressive' or 'restrictive'. Progressive means that you activate DirectView and set a default format. Users for which no alternative settings have been made then see the spoolfile in the format you have defined. Restrictive means that you activate DirectView but set the default conversion to *NONE. Users then see their standard 5250 spool display. A compromise between these two options is also available. You activate DirectView, set default conversion to *NONE and activate the "Confirm format" option. This prompts for the format. The user can then leave the value *NONE to view the original spool, or select another format.

Use F10 to call system configuration.



0349 – DirectView system configuration

WRKSPLF change display option

This parameter controls display options.

The values allowed for this parameter are:

Y DirectView is active, settings are applied

N DirectView is not active, OS/400 spool display always used

Format for DSPSPLF

Specifies a display format for the spoolfile. Default = *NONE. The spool is displayed on the PC by the default application associated with the Windows file extension – HTML files with Internet-Explorer, PDF files with Adobe Acrobat Reader, etc. When configuring the PC components, you can however specify different applications for the file extensions for DirectView.

The values allowed for this parameter are:

***HTML** Sets HTML as the default file format. Data is displayed as a table, with alternating green and white rows to improve readability. The application used to display the files is your web browser.

***NONE** No conversion specified. The files are displayed in OS/400 format.

***CSV** Sets semicolon delimited text as the default file format. Before conversion, you will usually need to rework the spoolfile with an AutoMail definition to delimit columns with F13. The default application for viewing the file is Microsoft Excel.

***EPDF** Adobe's PDF file format, but in the Enhanced Version of DirectView PDF. This format supports elements such as form overlays, allowing you to use background JPG or TIF files with the spool to create complete printed forms.

***ORIG** Same effect as *NONE. The files are displayed in OS/400 format.

***PCL** Spool files on the iSeries in PCL format with PCL attributes such as fonts, graphics and barcodes cannot be displayed on 5250 terminals. This format allows you to display the spool on PCL-enabled viewers (for example Red Titan) on the PC.

***PDF** Sets Adobe PDF as the default file format. PDF files are displayed with Adobe Acrobat Reader.

***RAW** Copies the pure data stream to a PC file (used for PCL and AFP).

***TIFF** Converts the spoolfile to TIFF graphic file format displayed with the DirectView Imageviewer.

***TXT** Sets ASCII text as the default file format.

***GUMBO** Converts the spoolfiles with SPLAMATIC, licensed software by Gumbo.

***HPT** Host Print Transform. The conversion will be executed on the host.

Cornfirm format

Specifies whether or not the user is prompted to select a file format. Setting the parameters "Change WRKSPLF option" and "Confirm format" to "Y" means you don't have to define each user separately in DirectView.

The values allowed for this parameter are:

Y Prompt for the file format

N Use the default format

Use AutoMail for DSPSPLF

Specifies whether or not AutoMail for DSPSPLF is used. AutoMail is licensed DirectView software that allows you to define complex conversion rules and functions applied when creating the PC file. You can use graphics, create simple graphic elements, offset spools, delete ranges and more.

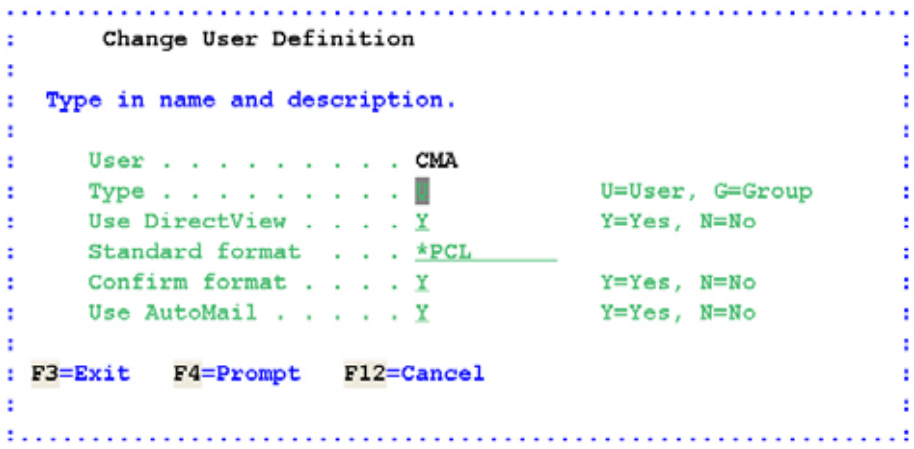
The values allowed for this parameter are:

Y Use AutoMail for DSPSPLF

N Do not use AutoMail for DSPSPLF

16.1.2 Create DirectView user definition

You can use **F6** change the definitions for users or user groups.



0350 – Change user definition

User
The user's iSeries ID.

Type
Applies the definition to a user or group.

Use DirectView
Specifies whether or not DirectView is used for this user. You can use this option to temporarily disable the DirectView conversion function.

Standard format
Defines the standard format for the user or group.

The values allowed for this parameter are:

***HTML** Sets HTML as the default file format. Data is displayed as a table, with alternating green and white rows to improve readability. The application used to display the files is your web browser.

***NONE** No conversion specified. The files are displayed in OS/400 format.

***CSV** Sets semicolon delimited text as the default file format. Before conversion, you will usually need to rework the spoolfile with an AutoMail definition to delimit columns with F13. The default application for viewing the file is Microsoft Excel.

***EPDF** Adobe's PDF file format, but in the Enhanced Version of DirectView PDF. This format supports elements such as form overlays, allowing you to use background JPG or TIF files with the spool to create complete printed forms.

***ORIG** Same effect as *NONE. The files are displayed in OS/400 format.

***PCL** Spool files on the iSeries in PCL format with PCL attributes such as fonts, graphics and barcodes cannot be displayed on 5250 terminals. This format allows you to display the spool on PCL-enabled viewers (for example Red Titan) on the PC.

***PDF** Sets Adobe PDF as the default file format. PDF files are displayed with Adobe Acrobat Reader.

***RAW** Copies the pure data stream to a PC file (used for PCL and AFP).

***TIFF** Converts the spoolfile to TIFF graphic file format displayed with the DirectView Imageviewer.

***TXT** Sets ASCII text as the default file format.

***GUMBO** Converts the spoolfiles with SPLAMATIC, licensed software by Gumbo.

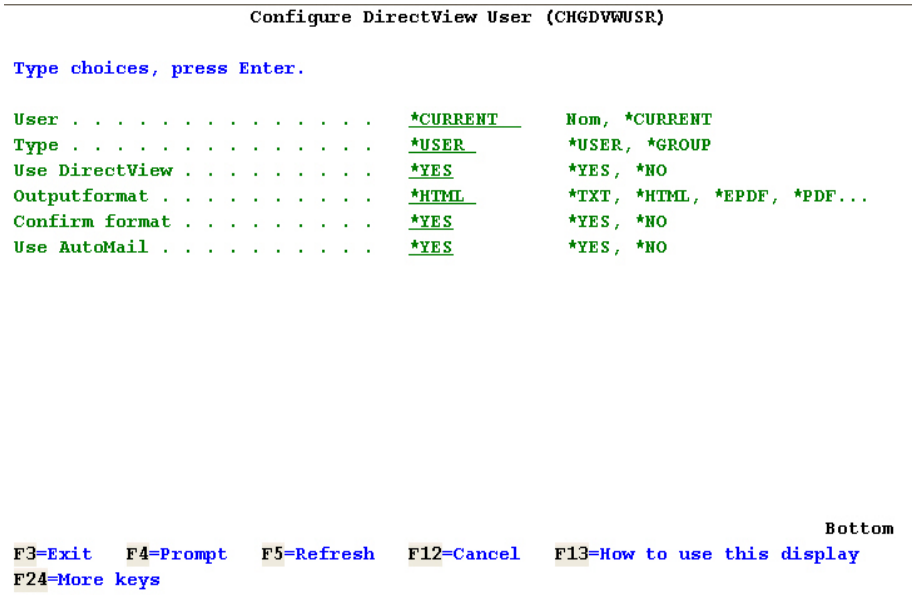
***HPT** Host Print Transform. The conversion will be executed on the host.

Confirm format
Defines whether you want to prompt for the file format each time a spoolfile is converted. If you set this parameter to "Y", the user can select the format used to display each spoolfile.

Use AutoMail
Specifies whether the AutoMail definition is used.

16.2 Configure DirectView users (CHGDVWUSR)

To provide users and administrators maximum flexibility when setting conversion formats, you can use the command CHGDVWUSR for configuration. For example, you can let the user select the format from a menu, or select formats from applications to optimise your workflow.



0351 – Configure DirectView users

User (USER)
The user for which DirectView is being configured.

The values allowed for this parameter are:

Name A valid user ID or group name

***CURRENT** Changes the settings for the current user

Type (TYPE)

The values allowed for this parameter are:

***USER** Changes a user.

***GROUP** Changes a group.

Use DirectView (USE)

Specifies whether or not DirectView is used.

The values allowed for this parameter are:

***YES** Use DirectView

***NO** Do not use DirectView

Output format (FORMAT)

***HTML** Sets HTML as the default file format. Data is displayed as a table, with alternating green and white rows to improve readability. The application used to display the files is your web browser.

***NONE** No conversion specified. The files are displayed in OS/400 format.

***CSV** Sets semicolon delimited text as the default file format. Before conversion, you will usually need to rework the spoolfile with an AutoMail definition to delimit columns with F13. The default application for viewing the file is Microsoft Excel.

***EPDF** Adobe's PDF file format, but in the Enhanced Version of DirectView PDF. This format supports elements such as form overlays, allowing you to use background JPG or TIF files with the spool to create complete printed forms.

***ORIG** Same effect as *NONE. The files are displayed in OS/400 format.

***PCL** Spool files on the iSeries in PCL format with PCL attributes such as fonts, graphics and barcodes cannot be displayed on 5250 terminals. This format allows you to display the spool on PCL-enabled viewers (for example Red Titan) on the PC.

***PDF** Sets Adobe PDF as the default file format. PDF files are displayed with Adobe Acrobat Reader.

***RAW** Copies the pure data stream to a PC file (used for PCL and AFP).

***TIFF** Converts the spoolfile to TIFF graphic file format displayed with the DirectView Imageviewer.

***TXT** Sets ASCII text as the default file format.

***GUMBO** Converts the spoolfiles with SPLAMATIC, licensed software by Gumbo.

***HPT** Host Print Transform. The conversion will be executed on the host.

Confirm format (CONFIRM)

This parameter sets whether or not to prompt for a format.

The values allowed for this parameter are:

***YES** If you set this parameter to "YES", the user can select the format used to display each spoolfile.

***NO** If you set this parameter to "NO", the user cannot change the default format.

Use AutoMail (USEATM)

Specifies whether or not AutoMail definitions are used for conversion.

The values allowed for this parameter are:

***YES** Use AutoMail

***NO** Do not use AutoMail

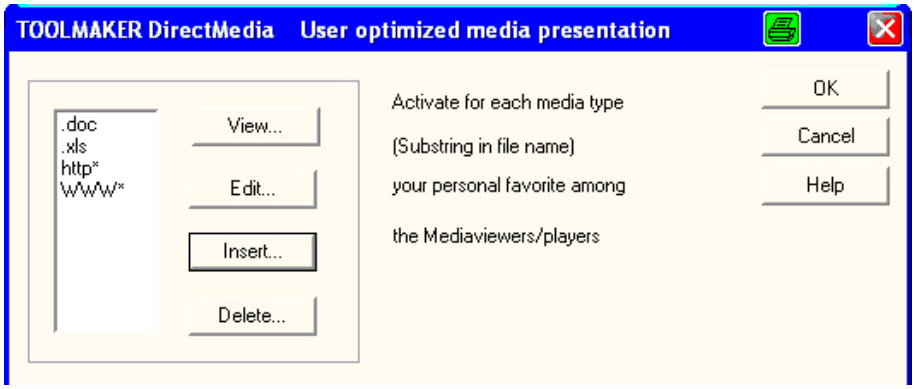
16.3 Assign other viewer programs to document types

After installing DirectMedia, the PC software used to receive and display converted spoolfiles, you can use "**Viewer and Parameters**" in the DirectMedia Start menu to associate programs other than the default Windows applications with specified document types.

Note:

For example, you can assign Excel to documents with the file extension .XLS. DirectMedia will then automatically run Excel for documents with the extension .XLS.

From the DirectMedia Start menu, choose **Start – Program Files – DirectMedia – Viewer and Parameters**.



0352 - Viewer settings

The dialog that appears contains the following options:

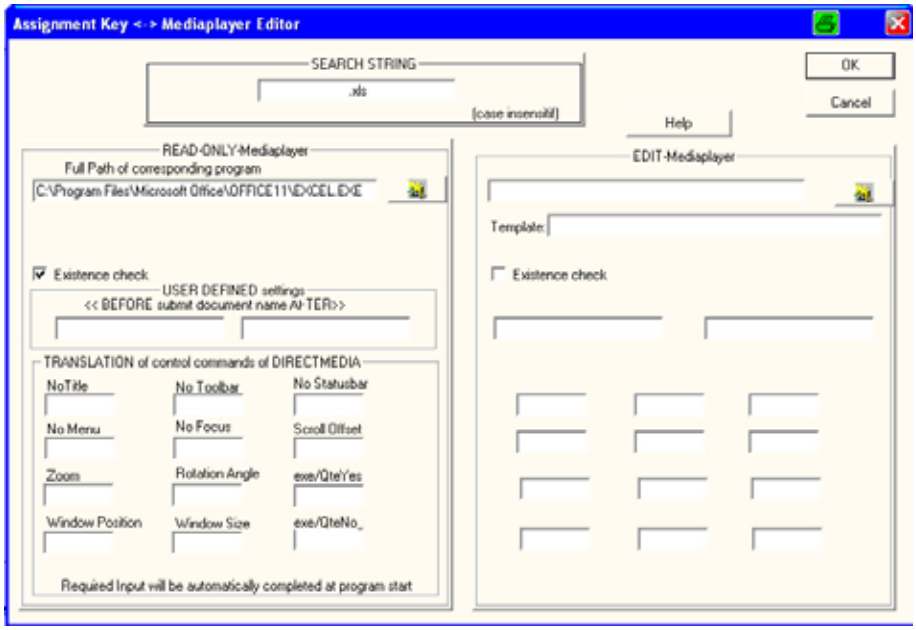
View
Use this option to display associations with alternative viewer programs.

Edit
Use this option to change the association of file types with alternative viewer programs

Add
Add a new viewer program association for a file type.

Delete
Delete the association for the viewer currently displayed.

Here is an example showing an existing definition:



0353 - Assigning a document to Mediaplayer

Search string (file extension)
Enter the file extension for the document type. For example: .XLS for Excel files. You can also search for strings in the document name. For example, www* finds all document names beginning with www.

Full path of the viewer program
Enter the full path and program name for the viewer. **For example: C:\PROGRAM FILES\MICROSOFT OFFICE\OFFICE11\EXCEL.EXE.** If the path is in the path list (AUTOEXEC.BAT or registry path), the viewer program name is sufficient

User defined settings for viewer programs
Please note that these parameter settings depend on the viewer specified. For example: For example, Excel always opens a file as read-only if the parameter /r is passed before the document name.

Submit document name BEFORE / AFTER
Passes a parameter before or after the document name.

No title / No toolbar / No status bar / No menu / Focus
Use these fields to pass parameters specific to the viewer in use.

Zoom / Rotation angle / Scroll offset / Window position and size
Use these fields to pass parameters specific to the viewer in use.

EDIT Mediaplayer
Settings for document editing and templates (for example display with WordView, edit with Word).

Template
Specifies the template used when creating a new document in edit mode.

17.0 DirectView – Conversion and Display

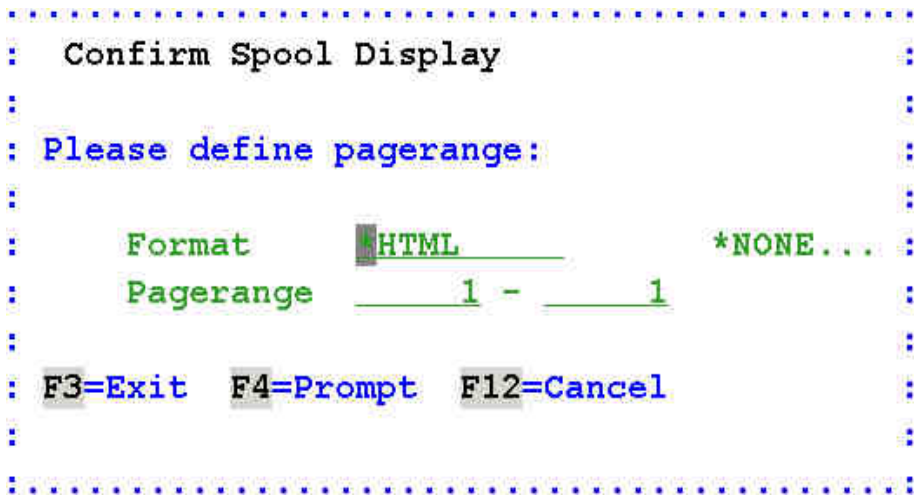
A couple of points to note before you can use DirectView to display spoolfiles on the PC.

- **DirectView and DirectMedia must be installed and configured.**
- **The spoolfile display under WRKSPLF must be set to "Advanced" with F21 and option 2.**

17.1 Display spoolfile

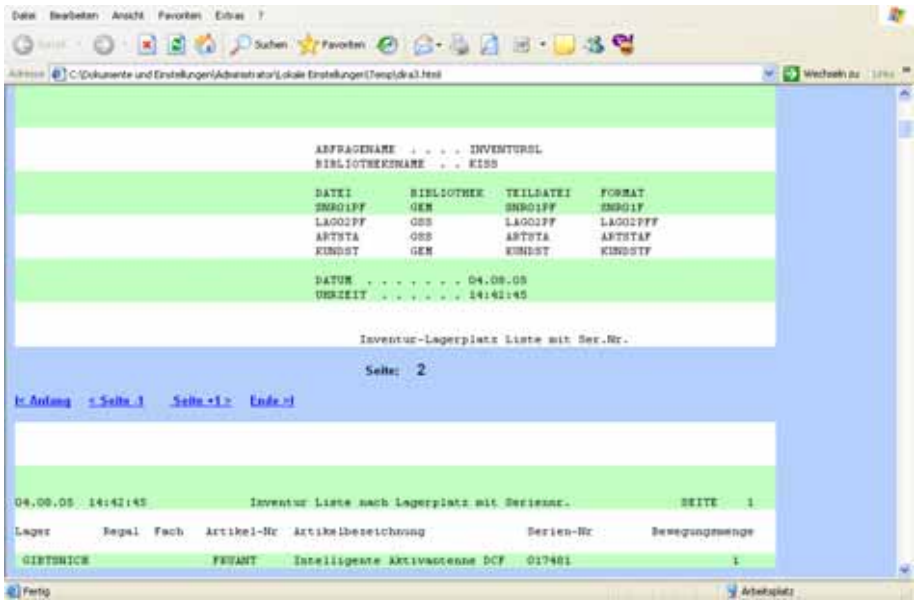
Call WRKSPLF or WRKOUTQ and select a spoolfile with option 5=Display.

Depending on your settings, the converted spoolfile will be displayed or you will be prompted to choose a file format. Note that with large spoolfiles, you can also select a page range for conversion in the Confirm Spool Display dialog.



0360 – Confirm format

When you press Enter, the spoolfile is read, converted and sent to the PC.



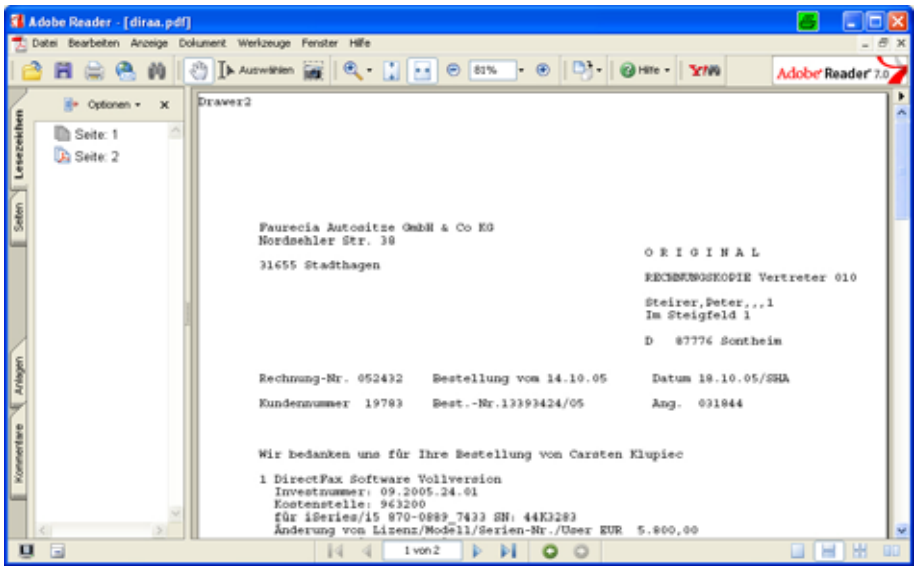
0358 – HTML spoolfile

17.2 Spool attributes – Create AutoMail definition

AutoMail is a module in the Toolmaker software DirectMail that allows you modify spoolfiles, for example by adding forms, changing fonts, adding or deleting line ranges etc. You can use AutoMail definitions with DirectView displays by setting the Use Automail Y/N parameter. Because DirectView is a program component of DirectMail, all AutoMail functions are available.

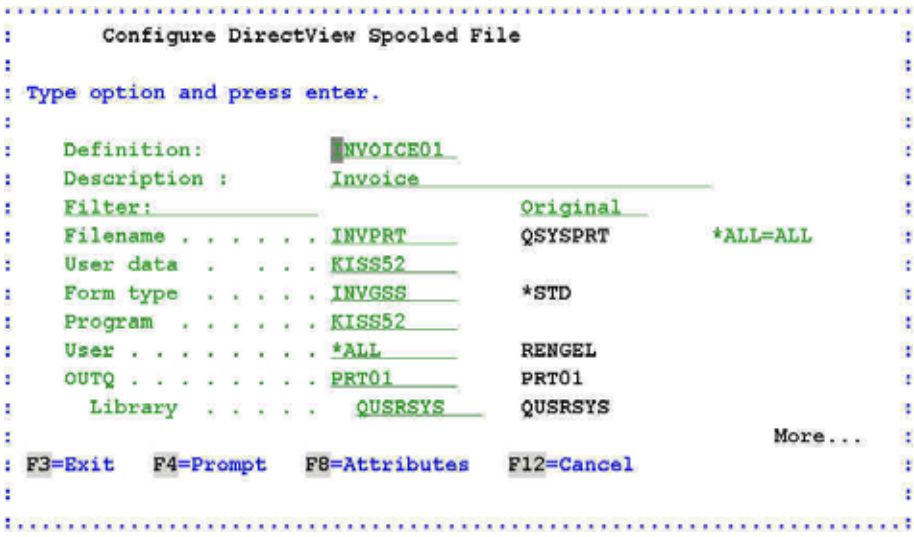
To allow you to incorporate forms when converting, DirectView includes a function for creating simple AutoMail definitions.

If you have "SPLCTL" rights in your user profile, you can use option 8 in the spoolfile overview to create AutoMail definitions.



0361 - An invoice displayed as a standard PDF

This is how the spoolfile for an invoice looks after conversion to standard PDF format. To change the appearance of the file, you can select it with **option 8** and create a simple AutoMail definition.



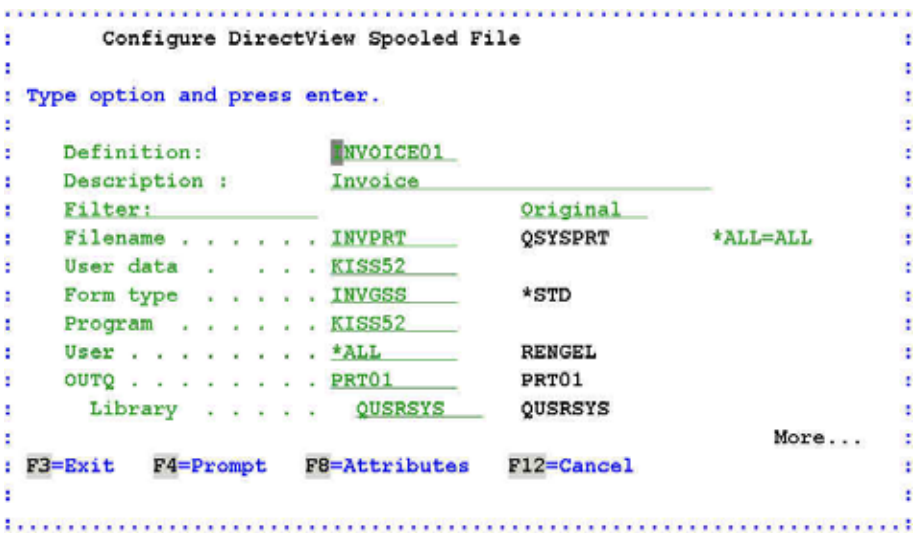
0362 – Creating an AutoMail definition

Definition / description

If you maintain a large number of definitions, the **Definition** and **Description** fields allow you to search through them.

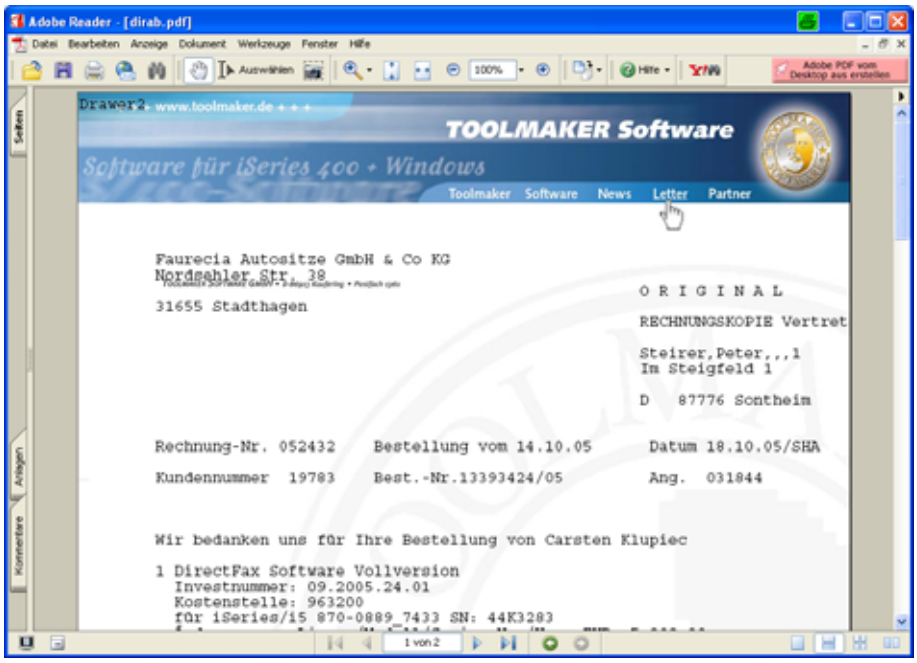
Filter

You can use the **Filter** fields to specify the spoolfile to be converted with a definition. For all contents of a filter field, use the special value ***ALL**.



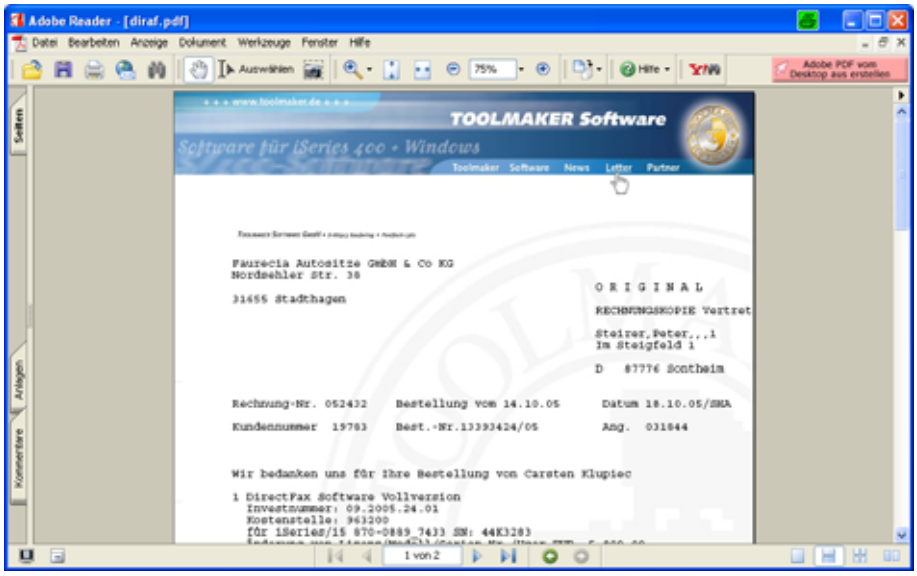
0363 - Storing a form

To store a form, the format must be set to "***EPDF**". You can then use **F4** in the "**Form**" field to select the graphic file you want to use as the background for the PDF file from the IFS folder **/Toolmaker/DirectMail400/Forms**. You can copy graphic files from the PC to this folder using either a network drive or the iSeries Navigator.



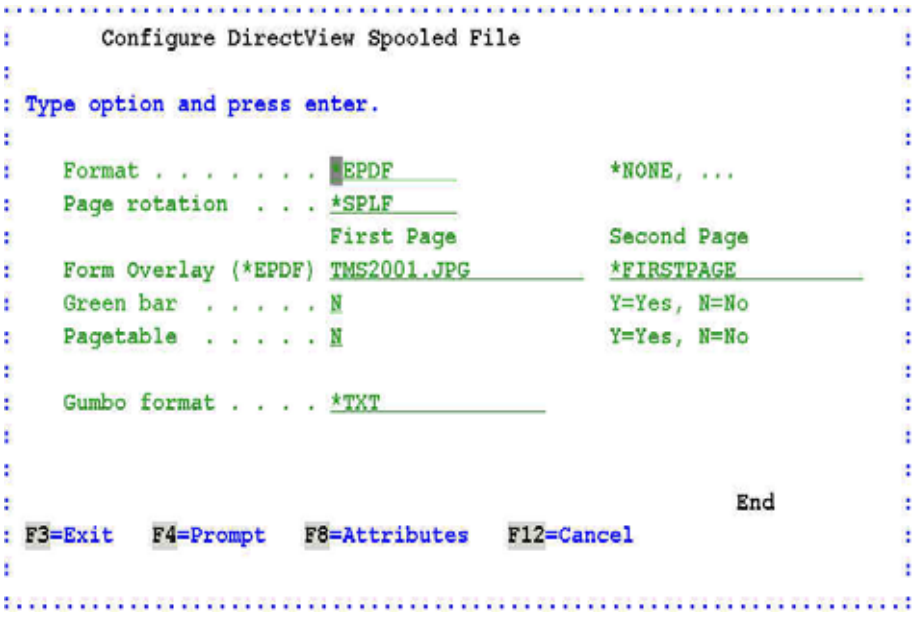
0365 – A PDF file with a background form

This is an unedited PDF file with a background form.



0366 - A PDF file optimised with an AutoMail definition

Here is an example of an AutoMail definition that has been reworked with AutoMail. In this example, the first line has been deleted and four blank lines added.



0364 - Display spool attributes

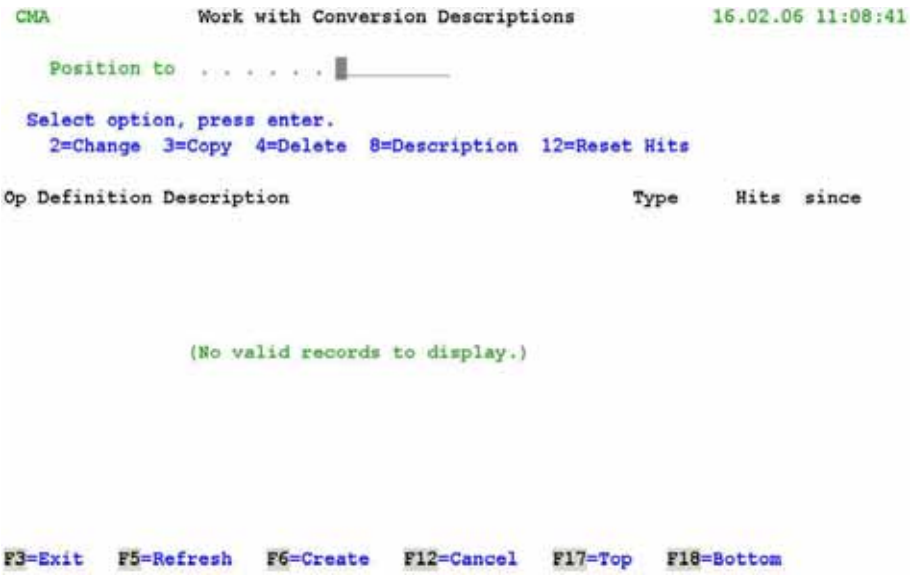
18.0 Conversion descriptions

With conversion descriptions additionally to conversions that run in one process step (e.g. conversion into HTML, TXT or CSV) complex, user defined conversion routines can be configured. With this external spool converters can be integrated and standard conversion can be configured.

Note: Using the parameter FORMAT the conversion description can be specified for all conversion commands and routines.

18.1 Work with conversion descriptions (WRKSPLCNV)

Each description consists of a sequence of CL commands that will be processed during conversion. Variables that will be provided by DirectMail can be inserted into the CL commands.



0368 - Work with conversion descriptions

Options

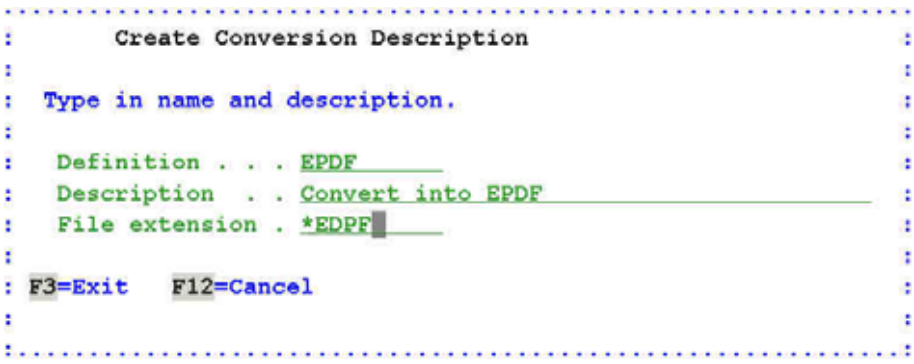
2=Change
Use this option to change an existing conversion description. *3=Copy*

4=Delete
Use this option to delete a conversion description.

8=Description
Use this option to modify the designation of a conversion description.

12=Reset hits
Use this option to reset the counter to zero.

18.1.1 Create a conversion description



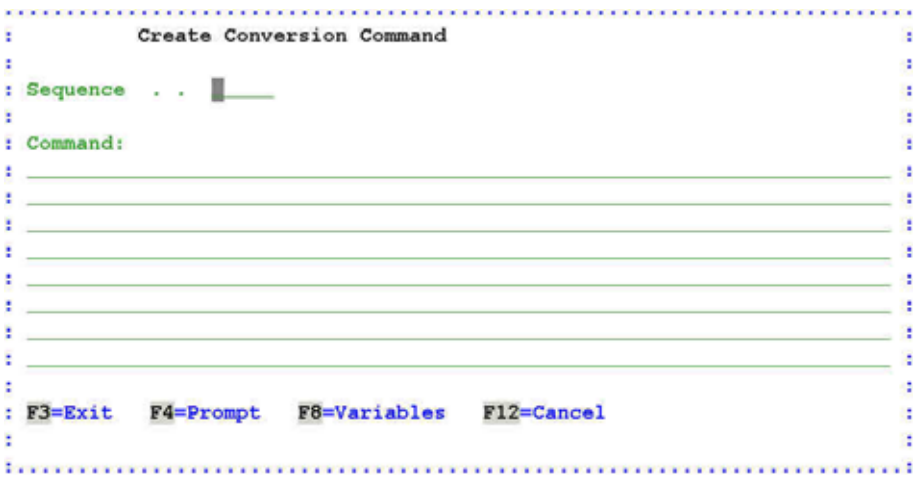
0369 - Work with conversion descriptions

Definition
Name of the conversion description

Description
Explaining designation for the conversion description.

File extension
File extension of the conversion description.

18.1.2 Create a conversion command

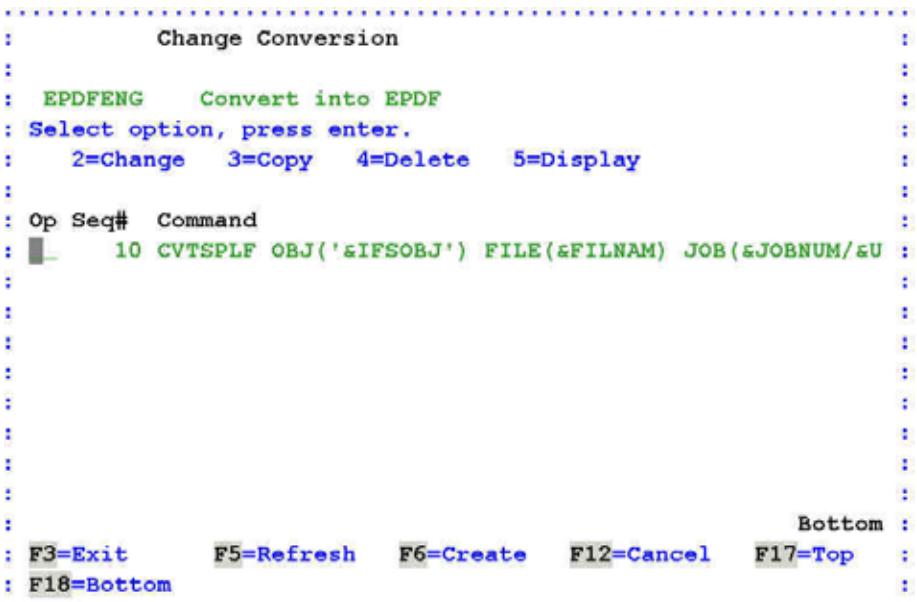


0370 – *Create conversion command*

Sequence
Enter a sequence number for the processing sequence of the CL commands.

Command
Enter the CL command including the corresponding parameters.

18.1.3 Change conversion command



0372 – Edit conversions

0371 – Change conversion command

Example: CVTSPLF OBJ('&IFSOBJ') FILE(&FILNAM)
JOB(&JOBNAM/&USRNAM/&JOBNUM)
SPLNBR(&FILNUM) FORMAT(*EPDF)

&IFSOBJ IFS object

&FILNAM Spool file name

&JOBNAM Spool file job name

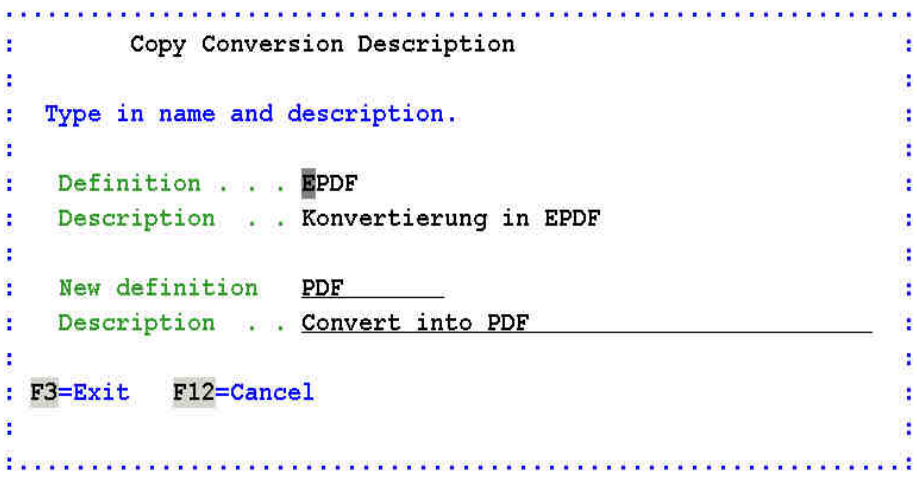
&USRNAM Spool file job user

&JOBNUM Spool file job number

&FILNUM Spool file job number

The above command line would execute a simple conversion to *EPDF.

18.1.4 Copy conversions



0373 – Change conversion command

New Definition
Enter a new definition.

Description
Enter a new description.

18.1.5 Delete conversions

Using this option a conversion can be deleted.

0374 – Delete conversions

19.0 Enhancements/Corrections

The following is a summary of enhancements and corrections in the last three releases.

19.1 Version 3.14

- Memory areas not released when converting spoolfiles to *TIF.
- Form scaling for *EPDF incorrectly calculated.
- Form scaling for *EPDF incorrectly calculated.
- Parameter MARGINS2 ignored for command SNDSPLEML.

19.2 Version 3.20

- The file DMDSTLOG now records the PE definition used to distribute an email. This is shown with option 25 in WRKEML.
- Command CFGDIRMAIL now includes the parameter RGZDLTPERM. This parameter defines whether email is deleted permanently during reorganisation or moved to the folder for deleted objects. For example, to move email from a folder to the "Deleted" folder after ten days and then permanently delete it after another ten days, set 10 days for the original folder and 20 days for the "Deleted" folder.
- Automail now contains a new standard index: SPLUDD = User Defined Data of the Spooled File
- PDF conversion using *GUMBO now supports overlay as PDF, JPG etc. This function is supported in AutoMail, CVTSPLF, WRTEMLAPI, SNDSPLEML.
- The parameters for the DirectMedia path in CFGDIRMAIL have been removed. They are not required in the new version of DirectMedia.
- DirectMedia installation on the iSeries no longer required to use DirectMedia in DirectMail. DirectMedia must now be installed and started on the PC only. The shared network drive is also no longer required.
- New function key F11=View in the program WRKATMDEF (Work with AutoMail definitions). Filter settings for the AutoMail definition are shown in the second view. There is also a new option 9=DirectView. This option allows you to change the conversion settings required for DirectView.
- Two new input fields added to the Spool Filter menu in the AutoMail editor:
  Use in DirectView N
  Use in AutoMail . Y

Specifies whether the AutoMail definition is used for DirectView or AutoMail.

- With the new command WRKDVWUSR (Work with DirectView users), you can register users and set user defaults. You can define both users and user groups.

- If you set this parameter "WRKSPLF Change display option . . CHGOPTDSP" to *YES in the command CFGDIRMAIL, Option 8=Attributes changes in WRKSPLF and WRKOUTQ. The program used for fast configuration of spool conversion with DirectView is called if the current user has *SPLCTL rights. Definitions created in this way are "mini" AutoMail definitions. They can be changed with WRKATMDEF.

- If IFS object selection is available and DirectMedia is installed, IFS objects can be displayed with option 5.

- If the product language is changed, an attempt is made to use the appropriate language library QSYSnnnn.

- New CHGDVWUSR command.

19.3 Version 3.40

- Additional characters for a valid email address can be specified in the positions 931-940 of DMDTAARA.

- DirectHelp includes online Help.

- DirectView – improved format check with *GUMBO

- The command RTVORGSPLF uses now also DirectView for display

- The spool conversion from SCS or AFP to TIF now supports also the limitation of the page range.

- The spool conversion from SCS or AFP to TIF now supports also the page format *SPLF.

- Spool files now can also be converted into the *HPT (Host Print Transform) format. This requires the specification of a printer type or WSCST object.

- The new parameters MFRTYPMDL and WSCST are also used for the conversion of Splf to PDF/EPDF. This file first will be processed per HPT and then the result (PCL5) converted into PDF. This conversion is useful when outputs from LSD-Forms or PRESCRIBE SCS Spools first shall be converted via HPT into PCL5 and then into PDF.

- Now the conversion of spools to CSV supports also an automatic method for setting the CSVTABS using the parameter CSVTAB(*AUTO). With it DirectMail scans a determined line range for finding suitable CSVTAB positions. The line range used can be set on the positions 941-943 (from) and 944-946 (to) in the DMDTAARA data area. Default values are lines 10-60.

- Additionally there are three new parameters for CSV conversion.

  Present empty CSV lines . . CSVSPCLIN
  *no = deletes empty lines)

  Present CSV format error . CSVNOFIT
  *no = deletes lines not fitting with the CSV scheme.

  Present CSV header lines .CSVHEAD
  *no = Lines identified as header lines will be deleted.

  (Best results using CSVSPCLIN=*NO and CSVNOFIT=*NO)

- The PCL converter now is able to process first Kyocera PRESCRIBE commands. Not supported commands will be ignored.

- Using the command WRKSPLCNV (work with conversion descriptions) now a user defined conversion routine can be configured. With this external spool converters can be integrated and standard conversion can be configured. Each description consists of a sequence of CL commands that will be processed during conversion. Variables that will be provided by DirectMail can be inserted into the CL commands.

  Example: CVTSPLF OBJ('&IFSOBJ') FILE(&FILNAM)
  JOB(&JOBNUM/&USRNAM/&JOBNAM)
  SPLNBR(&FILNUM) FORMAT(*EPDF)

  &IFSOBJ IFS object
  &FILNAM Spool file name
  &JOBNAM Spool file job name
  &USRNAM Spool file job user
  &JOBNUM Spool file job number

  The above command line would execute a simple conversion to *EPDF.

- The conversion description can be used in the commands CVTSPLF, WRTEMLAPI in the FORMAT parameter.

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